BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. CCV.] LONDON: SATURDAY, DECEMBER 1, 1860. [NEW SERIES.

A Course of Lectures ON URINE, URINARY DEPOSITS, AND CALCULI.

DELIVERED AT THE PATHOLOGICAL LABORATORY, DURING THE SESSION 1857-58.

BY

LIONEL BEALE, M.B., F.R.C.P., F.R.S.,

PHYSICIAN TO KING'S COLLEGE HOSPITAL; PROFESSOR OF PHYSIOLOGY AND OF GENERAL AND MORBID ANATOMY IN KING'S COLLEGE, LONDON; ETC.

LECTURE X.

URINE IN DISEASE. III. OF DENSE AND OPAQUE DEPOSITS. *Pus. Urates. Phosphates, general characters. Urates. Urinary Deposits associated with Urates. Urates in Urine, without forming a Deposit: Albumen present. Analyses of Deposits of Urates. Pus. Characters of the Urine. Tests for Pus. Of the Presence of Pus in Urine, in a Clinical Point of View. Earthy Phosphates. Triple or Ammoniaco-Magnesian Phosphate. Tests. Phosphate of Lime. Phosphate of Lime, in the form of Spherules and Small Dumb-Bells. Peculiar Form of Phosphate, usually regarded as consisting of Triple Phosphate. On the Crystalline Form of Phosphate of Lime.*

III.—SECOND CLASS OF URINARY DEPOSITS.

GENTLEMEN,—We now come to the consideration of the second class of deposits, which form a bulky, dense, opaque, and often abundant precipitate, which sinks to the bottom of the vessel, leaving a perfectly clear, or more or less turbid, supernatant fluid.

Pus, Urates, Phosphates. The most important deposits of this class are those consisting of *urate of soda*, *pus*, and *earthy phosphate*. To the practitioner these three deposits are especially interesting; and, as their presence in the urine is characteristic of important morbid conditions differing widely in their results from each other, while the appearance of the deposits to the naked eye is very similar, it is a matter of great importance that the practitioner should be able to distinguish them from each other with certainty, and at the same time with facility. Before entering, therefore, upon a detailed description of these bodies, let me draw your attention to an exceedingly simple method of distinguishing them. Let the clear supernatant fluid be poured off, and a little of the deposit be transferred to a test-tube. Upon the addition of about half the bulk of solution of potash, one of the three following points will be noted:—*No change* will be produced, in which case the deposit consists entirely of *phosphate*. Secondly, the mixture will become *clear*, and very *stringy* or *viscid*, so that it cannot be poured from the test-tube in drops. In this case, we may be certain that the deposit consists of *pus*. Thirdly, the solution of potash may cause the mixture to become clear, but not viscid, in which case *urate of soda and ammonia* enter very largely into the composition of the deposit. Often liquor potassæ gelatinises the mixture, but does not render it clear, in which case it is probable that both *pus* and *phosphates* are present. In any of the above instances, our conclusion as to the nature of the substance should be confirmed by some of the tests presently to be mentioned, and by microscopical examination.

Urates. From the researches of Heintz (*Lehrbuch der Zoochemie*), it appears that this deposit, usually termed *urate of ammonia*, really consists principally of *urate of soda* and *urate of ammonia*, with small quantities *of urates of lime and magnesia*. It forms the most common urinary deposit. A small quantity of urate is held in solution in healthy urine; and, in slight derangement of certain chemical changes going on in the body, it is often secreted in such quantity as to be deposited soon after the urine is passed. Urate of ammonia, when artificially prepared, crystallises in delicate needles; but in this form it is never found in the urine; for, as Dr. Bence Jones has shown, the slightest trace of chloride of sodium

Fig. 30.—Urate of soda crystallised in spherules, from healthy urine concentrated by evaporation.

causes the salt to assume an amorphous character, and increases the solubility of the urate by one-half. Urate of soda is sometimes found in the urine, forming globular masses, from different parts of which sharp spikes of uric acid project. In the urine of children, it is very frequently met with in the form of small spherical globules very like the crystals of carbonate of lime from horses' urine; and these sometimes occur in the adult. Some of the largest spherules I ever saw are figured in the *Archives of Medicine*, vol. i, p. 249. See also *Illustrations*, Plate VIII, Figs. 2, 5, and 6. In Fig. 30, some spherules of urate of soda, obtained by concentrating healthy urine, are represented.

Urate of soda is not very soluble in cold, but is readily dissolved by a small quantity of warm water; from which, however, it is deposited as the solution cools. It is readily dissolved by alkalies, and also by solutions of alkaline carbonates and phosphates. Pure urate of soda crystallises in small acicular crystals, which are more or less aggregated together. In this form, it is found in the pasty deposits forming chalk-stones in cases of gout. This thick deposit contains much water. In one specimen I examined, the solid matter only amounted to 29.9 per cent., and consisted chiefly of urate of soda.

Deposits of urate of soda vary very much in colour, sometimes occurring as the white or pale "lateritious deposit" or "nut-brown sediment"; while in other cases the deposit has a pink, brown, or even dark reddish colour. The amorphous urate is represented in the *Illustrations*, Plate VIII, Fig. 1. Upon the addition of moderately strong acids, the deposit of urate is slowly dissolved; but in a short time a slight granular precipitate may be observed, which, upon microscopical examination, is found to consist of rhomboidal crystals of uric acid. It is not uncommon to meet with specimens of urate deposit which become decomposed after the urine has left the bladder, when numerous crystals of uric acid are deposited. If urate of ammonia be treated with nitric acid, and, after evaporation to dryness, ammonia be added, the beautiful purple colour, owing to the formation of murexide, is produced. This reaction will come under our notice when we discuss the characters of uric acid. Rubbed with caustic lime, a perceptible odour of ammonia is evolved.

Urinary Deposits associated with Urates. This deposit of urates is more frequently accompanied with oxalate of lime than with any other salt. It has been shown that urates may be readily decomposed into oxalates after the urine has been passed. The crystals of oxalate are often so minute as readily to escape detection in the abundant deposit of urate, unless the latter be dissolved by the addition of a few drops of solution of potash. *Triple phosphate* is not unfrequently met with

amongst the urate, and occasionally a deposit of phosphate of lime has been observed, in which case the reaction of the urine will be neutral or even alkaline. Urate of soda is occasionally the cause of the dark granular appearance exhibited by certain casts, as may be proved by slightly warming the deposit, and then examining it with the microscope, when the casts will be found to have become clear.

Urates present without forming a Deposit: Albumen present. Often the urate remains suspended in the urine without forming a visible deposit, and produces a curious opalescence. Sometimes the urine resembles in appearance the so-called chylous urine; but its true nature is readily made out by the application of some of the tests above referred to. (See also *Chylous Urine.*) If albumen be present in urine containing urate of ammonia, it will not become clear by heat, or rather, it will at first clear, but soon become turbid again, in consequence of the precipitation of the albumen. With a little care, however, in applying the heat, the upper stratum of urine in the test-tube may be made hot enough to coagulate the albumen, the middle stratum being *cleared* by the solution of the urate without the albumen being thrown down, while in the bottom of the tube the deposit remains unchanged. In performing this experiment, you must hold the test-tube at its lower part.

Analyses of Deposits of Urates. The urine of a child suffering from scarlatina, with delirium and unconsciousness, contained an abundant deposit of urates. It was acid; specific gravity, 1025.

Analysis 60.

Water	932.2	
Solid matter	67.8	100·
Organic matter . .	59.03	87.07
Fixed salts . . .	8.77	12.93
Uric acid . . .	1.19	1.75

In a deposit which was composed of rounded globules, with small sharp spicules projecting from them (uric acid), I found the following constituents: phosphate of lime, urate of soda, and other urates. I found a considerable quantity of these spherules in the urine of a man suffering from pneumonia, and they had the following chemical characters. They exhibited distinct evidence of the presence of uric acid by the murexide test. They were soluble in boiling potash; and when, to the alkaline solution, excess of hydrochloric acid was added, well defined crystals of uric acid were formed. Upon exposure to a red heat, an odour like that of burnt horn was exhaled; and, after decarbonisation, a moderate quantity of a white ash remained, which dissolved in acids with effervescence; and from the acetic acid solution a precipitate was thrown down, upon the addition of oxalate of ammonia. I conclude, therefore, that urate of lime entered into the formation of these crystals. The quantity of crystals at my disposal was far too small to make a quantitative analysis.

Pus. The next deposit to be considered is pus. Pus is not found in healthy urine, although it is very frequently met with in the urine of persons passed the middle period of life whose general health is good. The changes by which a healthy mucous membrane becomes converted into a pus-forming surface are not yet well understood; but certain it is that such a change may take place without the essential purposes of the mucous membrane being interfered with. The portion of the genito-urinary mucous membrane most frequently affected in this way is undoubtedly the urethra, and I believe, next to this, that of the ureters and pelvis of the kidney; while the functions of the bladder, as a general rule, become seriously deranged before its mucous membrane forms much pus. To this last statement there are, however, exceptions. That an enormous quantity of pus may be formed in the pelvis of the kidney and in the infundibula, without seriously interfering with the general health of the patient, is a fact which has been confirmed by many cases. One I particularly recollect—a woman in the hospital, about five or six years ago, under Dr. Todd, who for upwards of a twelvemonth had been passing urine a fourth part of the bulk of which consisted of pus. This patient had not suffered in nutrition or in general health, and she had gone through her occupation as servant as usual.

Much pus is often formed upon the mucous membrane of the vagina, which will, of course, be found in the urine, accompanied with some of the large cells of vaginal epithelium. The urine of men after the age of forty often contains a greater or less number of pus-corpuscles—a fact of which I was not aware until I had subjected the urine of a great number of hospital patients indiscriminately to examination. In private practice, the same point is noticed very frequently. It is, indeed, more common to find a few pus-corpuscles in the urine after this period of life, than to find it free from them. This fact is important, and shows that the existence of pus in the urine must not, *per se*, be regarded as evidence of serious disease.

Characters of the Urine. Pus generally forms an opaque cream-coloured deposit, which sinks to the bottom of the vessel, the supernatant fluid being generally slightly turbid, from the presence of a few pus-globules. The deposit, however, readily diffuses itself again by agitation. The urine will always be found to contain a little albumen derived from the liquor puris. If, however, the albumen exist in large quantity, it is probably derived from some other source. If the urine be alkaline, the pus is no longer present as a cream-coloured deposit, but exists as a gelatinous or stringy mass, which adheres firmly to the sides of the vessel containing it. It is to this glairy mass that the term mucus has been, and even still is, carelessly applied. The viscid, glairy, mucus-like deposit arises from the carbonate of ammonia, set free by the decomposition of urea, reacting on the pus-globules in a manner similar to that in which potash behaves. The microscopical characters of the pus-corpuscle are clear and well defined.

Tests for Pus. The tests, then, which may be relied upon for detecting the presence of pus in urine, are, the addition of solution of potash to the deposit; and of nitric acid, and the application of heat to a portion of the supernatant fluid, in order to detect the

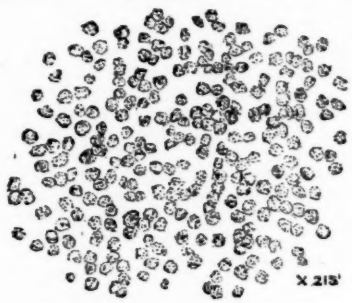

Fig. 31.—Pus corpuscles from urine.

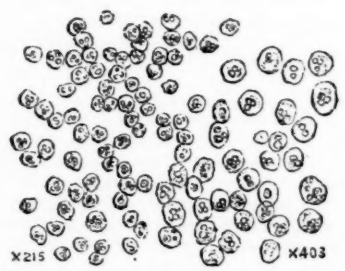

Fig. 32.—Pus corpuscles acted upon by acetic acid.

presence of albumen. Cases from time to time come under notice in which the amount of albumen is very small; but still the quantity may appear to us to be in too large a proportion to the pus-cells present, to belong solely to the liquor puris. In such a case, we should be led to suspect kidney-disease, and should therefore very carefully search the deposit for casts of the tubes.

Microscopical Characters of Pus. In those cases in which the pus is in too small quantity to be detected by chemical tests, we must rely upon the microscopical examination of the deposit, and the development of two or three small round bodies in the centre of each pus-globule upon the addition of a drop of acetic acid. Pus-globules always have a granulated appearance in the microscope, and, when fresh, exhibit, under ordinary magnifying powers, no well defined nucleus; the outline is usually distinct and circular, but it is finely crenated. Upon the addition of acetic acid, the globule increases somewhat in size, becomes spherical, owing to endosmosis, with a smooth faint outline; and from one to four nearly circular bodies are developed in the centre of each. (Fig. 32.)

Of the Presence of Pus in Urine in a clinical point of view. You will have gathered from what I have already said, that the presence of a few pus-corpuscles in urine is a fact which need

not excite our alarm; that the mucous membrane of the urethra in many cases becomes affected in a slight degree in the same manner as some other mucous membranes; and that pus-corpuscles are formed in small number upon its surface, without causing any material impairment of structure or derangement of function. In the urine of the female, it is very common to find small quantities of pus which are derived from the mucous membrane of the vagina. When, however, pus is found in the urine in sufficient quantity to form a deposit visible to the naked eye, it should excite our attention. The fact will probably bear in a very important manner upon the diagnosis of the case. Pus may be derived from any part of the genito-urinary mucous membrane; from the surface of the *urethra;* from the *prostate;* from the *bladder*, or from the *follicles of the mucous membrane* in these parts; from the *ureters;* from the *pelvis of the kidney*, or from the *secreting structure of the organ.* The pus may also come from an *abscess* opening upon any part of the surface of this mucous membrane.

It is often difficult to form an opinion as to the exact seat of formation of the pus; and it must be obvious that we ought never to come to a decision on such a point until we have accurately weighed all the evidence that a careful investigation of the case will afford. Microscopical examination will give us important help; but we must not rely upon this, or indeed upon any single mode of investigation. The question is an extensive one, and I shall only refer to one or two points connected with the evidence deduced from microscopical examination, as you are quite familiar with the nature of the other evidence to be obtained in such cases. You may often form some idea of the locality from which the pus has been derived by examining attentively the characters of any epithelial cells which may be mixed with it. (Lecture ix.) When pus is derived from the bladder, it generally contains crystals of triple phosphate, and granules or small spherules of earthy phosphate mixed with it; and the symptoms of the case will generally enable you to decide if the pus is formed in this viscus. Large quantities of pus may escape from the bladder for a number of years. I know of one gentleman who has passed pus in considerable quantity from the bladder during a period of twenty-five years. The suppuration of the bladder may be due to gonorrhœa, to gout, and to a state of mucous membrane which is termed catarrh of the bladder. When the pelvis of the kidney is dilated and sacculated (a form of pyelitis), the quantity of pus passed in the urine is often enormous; and this may last for years, until the kidney becomes a mere pus-forming cyst, which, in favourable cases, gradually contracts; the formation of pus ceases; the cyst slowly wastes; and the patient perfectly recovers; the work of the two kidneys being performed by the remaining one, which has gradually undergone an increase in size corresponding to the increased work it is called upon to perform. When pus is derived from the pelvis of the kidney, the earthy phosphates are very frequently completely absent. There is a chronic state of ulceration of the ureters and pelvis of the kidney and bladder, in which pus is formed in considerable quantity, leading to the most distressing symptoms. Pus may depend upon the existence of old stricture.

Abscesses form in the kidney as in other organs; and, after the abscess has burst, pus makes its way into the urine. The inflammation of the mucous membrane of the kidney often extends upwards from the bladder. The presence of a calculus in the kidney, in the ureter, or in the bladder, may set up inflammation which may go on to the formation of pus. A very small calculus will sometimes excite great irritation in the kidney, so that both pus and blood are voided in the urine.

Pus may be derived from a sloughing process going on in the kidney. Sometimes a portion of the organ sloughs off entire in these cases. My friend Mr. Newham, of Bury St. Edmunds, sent me, a short time since, a piece of kidney which had sloughed off, and was passed with much pus in the urine. Pus may also depend upon the presence of cancer in the kidney, or upon tubercle developed in the same situation.

Pus may come from an acute affection of the uriniferous tubes, and the corpuscles will be found free in the urine, and entangled in considerable number in casts. These cases are often very rapidly fatal. (See *Illustrations*, Plate xvi.)

Earthy Phosphates. The earthy phosphates soluble in acids, but insoluble in water and alkaline solutions, which are most commonly met with as deposits in urine, are, the ordinary *triple* or *ammoniaco-magnesian phosphate*, or the *phosphate of ammonia and magnesia;* and the *phosphate of lime.*

Triple or *Ammoniaco-Magnesian Phosphate.* The triple phosphate crystallises in two or three different forms. The most common form is that of the triangular prism with obliquely truncated ends; but these are sometimes complicated by the bevelling of the terminal edges. Not unfrequently the crystal is found much reduced in length, and the truncated extremities become so approximated as to give the appearance of a square the opposite angles of which are connected by straight lines; and thus an appearance very closely resembling that of an octohedral crystal of oxalate of lime is produced. Crystals

Fig. 33.—Crystals of triple phosphate and small globules of phosphate of lime, from urine.

of this salt are very frequently deposited from acid urine; and, when clear and unmixed with other deposits, they form a most beautiful microscopic object.

Tests. If ammonia be added to fresh urine, or to a solution of phosphate of soda and sulphate of magnesia, ammoniaco-magnesian phosphate is precipitated in the form of beautiful stellate crystals, as I mentioned when speaking of healthy urine. Besides these forms, Dr. Golding Bird describes two others in the form of simple stellæ, often so crowded as to appear like rosettes and penniform crystals, which latter are very rare.

Ammoniaco-magnesian phosphate is slightly soluble in pure water, particularly if it contain carbonic acid. It is insoluble in solutions of ammoniacal salts. Heated in the blowpipe flame, ammoniaco-magnesian phosphate evolves a disagreeable odour of ammonia, and afterwards fuses, producing a whitish enamel. If the phosphate of magnesia thus formed be dissolved in a little dilute acid, the triple salt may be again formed upon the addition of ammonia. The presence of phosphoric acid can readily be proved by the appropriate tests.

Deposits associated with Triple Phosphate. Ammoniaco-magnesian phosphate seldom occurs alone as a urinary deposit. Its presence is often associated with urate of ammonia, and sometimes with uric acid. I have also observed crystals of oxalate of lime mixed with those of triple phosphate. In highly alkaline urine, it is usually accompanied with phosphate of lime.

Phosphate of Lime occurs as minute granules, as small spherical masses, and it may also be noticed in the form of minute dumb-bells—an appearance probably due to the adhesion of two little spherules, which afterwards become coated with a fresh deposit of the phosphate. Phosphate of lime is usually associated with the triple salt, and is deposited from alkaline urine. In cases of disease of the bladder in which the urea becomes very rapidly decomposed into carbonate of ammonia, much amorphous phosphate of lime and triple phosphate are precipitated. It must not, however, be supposed that highly alkaline urine *necessarily contains* a very large *excess* of earthy phosphate; for often an excessive quantity of the salts have been found dissolved in acid urine. When the secretion is alkaline, the phosphates are precipitated, and become visible to the naked eye as a deposit. Phosphate of lime dissolves in strong acids without effervescence; and from this solution is precipitated in an amorphous form, upon the addition of ammonia. The salt is infusible before the blowpipe, unless mixed with triple phosphate; and its fusibility increases according to the quantity of the latter salt present. The lime may be recognised in the usual way by the addition of a solution of oxalate of ammonia to a solution of the salt in acetic acid.

Phosphate of lime is soluble in albumen; indeed, it is by reason of its solubility in this substance that the phosphate of lime formed by the action of phosphoric acid on the egg-shell becomes applied to the formation of the osseous system of the embryo chick. Mucus also is a solvent of this salt, and from the mucus of the gall-bladder a considerable quantity is deposited as decomposition proceeds. (Fig. 34.)

Phosphate of Lime in the Form of Spherules and small Dumb-Bells. Deposits of phosphate of lime are generally granular; but after a deposit has been allowed to stand for some days, little spherules are very frequently found, and it is also not uncommon to meet with small dumb-bell crystals. Crystals of the latter character are very often deposited in decomposing mucus, derived from several mucous surfaces, as well as in that of the urinary mucous membrane. Some of the

largest of these dumb-bell crystals of phosphate of lime are represented in Fig. 35. They were found in the urine of a patient suffering from continued fever, under the care of Mr. Carver of Cambridge, who sent me the specimen.

34 35

Fig. 34.—Dumb-bell crystals of phosphate of lime from the gall-bladder.
Fig. 35.—Dumb-bell crystals of phosphate of lime from urine.

A peculiar form of deposit of earthy phosphate is represented in Fig. 36. It consisted partly of phosphate of lime,

Fig. 36.—Unusual form of triple phosphate, and phosphate of lime. From the urine of a gentleman suffering from dyspepsia. × 215.

and partly of triple phosphate. There were no true crystals, neither was the deposit in a pulverulent form. The little angular masses represented were the only bodies found in this peculiar deposit.

Peculiar Form of Phosphate, usually regarded as consisting of Triple Phosphate. A phosphate of the form represented in Fig. 37 is not uncommonly found in urine. I have not been

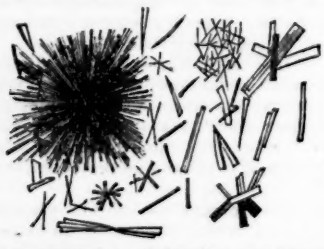

Fig. 37.—More uncommon form of phosphate, usually regarded as triple phosphate, crystallised differently from Fig. 33, which represents its usual form. These are probably the "simple stellæ" of Dr. Golding Bird's "neutral salt."

able to connect its presence with any special state of the system, nor to ascertain the conditions upon which its deposition depends. It is very frequently associated with oxalate of lime, and occurs in acid urine. A considerable quantity of these crystals were deposited from the urine of a man who had a rough oval calculus, composed of oxalate of lime, impacted in the ureter. The case is given in Dr. Todd's *Clinical Lectures*, 2nd ed., p. 562. They were examined as follows:—

(March 1851). "The deposit from about a pint and a half of urine was well washed with water and alcohol, and filtered; it was then dried, incinerated, and decarbonised. The form of the crystals had not been materially altered by the ignition; for, when examined by the microscope, scarcely any change could be observed.

"A portion of the decarbonised crystals were dissolved in dilute hydrochloric acid (they were only very slowly soluble in acetic acid).

"1. Ammonia and potash produced gelatinous precipitates.

"2. Chloride of barium caused a slight precipitate in the acid solution; but, upon the addition of excess of ammonia, a bulky white precipitate occurred.

"3. After the addition of ammonia and resolution of the precipitate by acetic acid, oxalate of ammonia was added, and a white granular precipitate was produced.

"4. After the addition of nitrate of cobalt and ignition in the blowpipe flame, a beautiful blue was given to the mass." This reaction usually occurs with phosphate of lime, as well as with alumina. Those crystals then consisted principally of phosphate of lime.

In another case which I examined, the crystals appeared to consist principally of phosphate of lime. They were dissolved in nitric acid, and ammonia added. An *amorphous* precipitate occurred; but no crystals were formed after the lapse of some hours. After separation of the lime by oxalate of ammonia, and filtration, ammonia and phosphate of soda were added. A very few crystals of triple phosphate formed after the lapse of some time. There was an abundant precipitate of oxalate of lime.

In other cases, a phosphate of magnesia seemed to predominate. From not being able to make satisfactory quantitative analyses, owing to the small quantity of the salt obtained for examination, I was unable to determine the exact nature of these crystals. They are, as I before said, found in acid urine; and phosphoric acid, lime, and magnesia, are present. These are probably the crystals which were regarded by the late Dr. Golding Bird as "small calculous concretions and simple stellæ of the neutral salt".

On the Crystalline Form of Phosphate of Lime. Dr. Hassall, in an interesting paper published in the *Proceedings* of the Royal Society, vol. x, p. 281, Jan. 1860, has stated that phosphate of lime is very commonly found in deposits from human urine in a crystalline form. He gives quantitative analyses of four specimens of deposit which contained the phosphates in the following proportions:—

Bibasic phosphate of magnesia .	0.15	0.47	4.30	
Bibasic phosphate of lime . .	1.85	6.18	5.41	1.96
	2.00	6.65	9.71	

Dr. Hassall states that Dr. Golding Bird's "penniform" crystals of ammoniaco-magnesian phosphate are really a modification of those of phosphate of lime. The crystals represented by Dr. Hassall in Figure 1 appear to be similar crystals to those I have delineated in Fig. 35, the chemical composition of which I have alluded to. See also *Illustrations*, Plate xxii, Figs. 1, 2, 3, 4, 5, 6. I have never obtained these crystals in sufficient quantity for a quantitative examination, but have examined several specimens qualitatively, and usually found that they contained ammoniaco-magnesian phosphate, as well as phosphate of lime. The latter was regarded as the less important constituent of the salt; and, in the absence of more exact examination, I thought it better to retain Dr. Golding Bird's nomenclature. If the crystalline form of the pure salt in Dr. Hassall'e fourth analysis is represented in his Fig. 1, the composition of these crystals is determined, and the phosphate of magnesia obtained in some of my examinations must be regarded as an impurity, and not as a necessary constituent.

Dr. Hassall, however, in the paper referred to, goes so far as to say "that phosphate of lime, in the form of crystals, is of much more frequent occurrence in human urine than the triple phosphate;" and that "granular calcareous deposits are much more rare than the crystalline." Now, in these statements, I think he will find that few observers will agree; for that the ordinary crystals so commonly present in the urine, and usually termed triple phosphate, are actually composed of that salt, there cannot be the smallest question. Crystals of exactly similar form may be readily obtained artificially. The salt is easily obtained from any urine by precipitation by ammonia, and is often found very nearly pure, in large quantity, in urinary calculi. That these crystals, so familiar to every one, are more frequently met with than any other form of earthy phosphate, crystalline or non-crystalline, I conclude no one will deny. That phosphate of lime often occurs in urine in an amorphous form, and not unfrequently in little spherules and small dumb-bells, as have been figured; and that, when thrown down from its solutions, the deposit is amorphous; and that in calculi it is amorphous,—are facts generally assented to, and they have been repeatedly confirmed. It seems to me that these observations militate against the conclusion arrived at by Dr. Hassall as to the relative frequency of the crystalline forms of phosphate of lime and triple phosphate.

It is important to bear in mind that in many cases, when large quantities of phosphate of lime are excreted in the urine, the salt is dissolved, and does not form a deposit. You must not, therefore, from the absence of a deposit, conclude that these salts are not excreted in abnormal quantity. The various forms of phosphate which have been described often occur in very small proportion, so that the observer would probably expect to find them in the third class of urinary deposits; but I have thought it better to describe them here, with the other salts of this kind, than to postpone their consideration.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

OVARIOTOMY IN LONDON HOSPITALS.

CASES UNDER THE CARE OF MR. BORLASE CHILDS, MR. CURLING, MR. ERICHSEN, MR. COOPER FORSTER, MR. HOLT, MR. HUTCHINSON, MR. NUNN, AND MR. SPENCER WELLS.

During the last three years, the operation of ovariotomy has attracted great attention, and the number of cases in which it has been performed, both in London and Provincial Hospitals and in private practice, has been so great that we are not surprised to find writers in France and Germany speaking of the "recent revival of ovariotomy in England." Still we find that no one has a very definite idea of the extent of this revival, or of the results of recent improvements in this operation, or in the after treatment. As one attempt to supply defective information we have prepared the following table, which, we believe, contains *all* the cases, either successful or unsuccessful, in which the operation has been performed in London hospitals during the last three years. The only cases omitted are those which have occurred in the practice of Mr. Baker Brown, at the Self-supporting Institution called the "London Home." We shall be glad to supply this omission in an early number, if Mr. Brown will supply notes of all the cases in which the operation has been performed in that Institution. In the table which follows, we have numbered the operations in the order of their performance, adding the hospital, the name of the operator, date of operation, and the result.

Table of Cases.

No.	Hospital.	Operator.	Date of operat.	Result.
1	Samaritan.	Mr. S. Wells.	Feb. 1858.	Recovd.
2	Metropol. Free.	Mr. Hutchinson.	Aug. „	„
3	Ditto.	Ditto.	Aug. „	Died.
4	Ditto.	Ditto.	Sept. „	„
5	Samaritan.	Mr. S. Wells.	Sept. „	Recovd.
6	Metropol. Free.	Mr. B. Childs.	Nov. „	Died.
7	Samaritan.	Mr. S. Wells.	Nov. „	Recovd.
8	University Coll.	Mr. Erichsen.	Nov. „	Died.
9	Samaritan.	Mr. S. Wells.	Jan. 1859.	„
10	Guy's.	Mr. C. Forster.	Feb. „	„
11	Metropol. Free.	Mr. B. Childs.	Feb. „	„
12	Samaritan.	Mr. S. Wells.	May „	Recovd.
13	Ditto.	Ditto.	June „	Died.
14	Ditto.	Ditto.	June „	Recovd.
15	Ditto.	Ditto.	July „	„
16	Ditto.	Ditto.	Oct. „	„
17	Westminster.	Mr. Holt.	Oct. „	Died.
18	Samaritan.	Mr. S. Wells.	Dec. „	„
19	Ditto.	Ditto.	Jan. 1860.	Recovd.
20	London.	Mr. Curling.	Feb. „	Died.
21	Samaritan.	Mr. S. Wells.	Feb. „	„
22	Middlesex.	Mr. Nunn.	Oct. „	„

We believe the above table gives the result of all the operations, twenty-two in number, performed in London hospitals, between January 1858, and November 1860. The general result is, 13 deaths against 9 recoveries. Seven of these recoveries, we believe, have been permanent, the patients still remaining strong and well. In two the patients recovered from the operation, but died some months afterwards of cancer. One of those cases occurred to Mr. Hutchinson, the other to Mr. Spencer Wells. If these two cases be subtracted from the recoveries, the deaths would be fifteen and the recoveries only seven. But we do not think it would be fair to do this in any comparison between the mortality after ovariotomy and after other operations. If a man were in good health for some months after lithotomy, or amputation, or the ligature of a large artery, the case would certainly be classed as successful in any statistical table; and we think the same rule should hold good as to ovariotomy. We have stated the fact, however, as of practical importance in deciding upon the operation in cases where a malignant growth of the ovary may fairly be suspected.

It is singular that *all* the cases of permanent recovery have occurred in one hospital, and in the hands of one operator. Of twelve cases in the Samaritan Hospital, there are four deaths against one temporary and seven permanent recoveries. Of ten cases in other hospitals, there were nine deaths, and only one temporary recovery.

Addresses and Papers

READ AT THE

TWENTY-SEVENTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in LIVERPOOL, JULY 27th, 28th, and 29th*, 1859.]

RETROVERSION OF THE GRAVID UTERUS.

By Thomas Skinner, M.D., Physician to the Northern Dispensary, Liverpool; Fellow of the Obstetrical Society of London, etc.

[*Read in abstract, 29th July*, 1859.]

II.—Retroversio Uteri post Conceptionem.

[*Continued from page* 910.]

(*n*) *Treatment and General Management.* The subject of the treatment or reduction of the displacement may be divided into two portions—

I. The means of relieving the bladder of its contents;
II. The various modes of reducing the gravid uterus.

I. *The Means of Relieving the Bladder of its Contents.* All parties, however widely they may differ in other respects, are quite agreed as to the use of the catheter being the first step in the treatment; and very properly so, as it is next to impossible to reduce the uterus with safety whilst the bladder is over-distended. Catheterism, under the circumstances, has not infrequently been a difficult operation; and, as it has sometimes been an actual impossibility in the hands of men of undoubted manual dexterity, I am inclined to think that, although the following remarks may contain little which is original, yet, being practical, they are not without some value.

One great difficulty in passing the catheter arises from retraction of the *meatus urinarius*, as was observed in the cases of Drs. Mitchell, Carmichael, and others (*Medical Times*, vol. xiv, p. 73, 1846; and *Annals of Medicine*, vol. iv, p. 285), and as I witnessed myself in two instances. In one of my own cases at the seventeenth week, the meatus was so far retracted that I failed in introducing within the meatus several forms of gum elastic and metal catheters. I then endeavoured to elevate the cervix with my finger, in order to relieve the urethra, but in this I also failed. Subsequently, I passed a sponge-tent between each ramus of the pubes and the body or neck of the uterus, when some urine dribbled away; but either the bladder was too much and too long distended to contract, or the urethra was compressed somewhere, because the patient was still unable to empty the bladder. By the swelling of the sponge-tent, however, the cervix was so far removed as to allow the meatus to be partly seen and better felt, and a flat silver catheter, with the concave surface looking towards the sacrum, was passed with ease almost directly upwards, when several pints of urine came away. I am not aware that sponge-tents have ever been tried before for such a purpose. I can speak of their efficacy in this individual case; but, from the accounts which I have read of the cases of Mr. Wall, Mr. Baynham, and others, I much fear that, in such cases, they might be found wanting.

Besides the meatus being drawn up out of sight, the urethra itself is very much elongated, and consequently much contracted in calibre. In Dr. Carmichael's fatal case (*op. cit.*), by pressing back the tumour, the urine gushed out, and the meatus came into view, but the catheter could not be passed above two inches. At the *post mortem* examination, the urethra had returned to its natural length: one finger was passed easily from the interior of the bladder through the urethra and meatus, and two fingers might almost have passed. May not the difficulty in passing the catheter in this case partly have arisen from the narrowing of the calibre of the urethra caused by the stretching? In other cases, the urethra is not only lengthened and contracted, but it is bent almost at a

right angle, as in Mr. Baynham's case. At the *post mortem* of Mr. B.'s case, after numerous ineffectual trials to introduce an elastic catheter into the bladder *per urethram*, at length, "it may be said by accident," the instrument entered the bladder. On being withdrawn, it was again introduced, but in place of entering the bladder as before, it passed into the uterus, which was now carefully opened, and the catheter was found betwixt the membranes and the parietes of the latter organ. The cervix uteri was much curved, and "the catheter had been forced out of the urethra, *where it formed an angle*, then passing forward in a direct line, entered the mouth of the womb. Death unquestionably resulted from laceration of the urinary canal, in consequence of which the bladder could never afterwards be properly relieved" (*Edinburgh Medical Journal*, 1830, p. 266). There are other cases on record where, the catheter having entered the bladder, the urine did not come away, or only partially escaped. In these cases it has been supposed that the urethra itself, or some portion of the neck of the bladder, becomes distended, forming, as it were, a second reservoir. This explanation may be correct, but there are no facts to demonstrate the truth of the assertion. I am much more inclined to believe that the explanation is to be found in the mechanism of the catheter and the tact with which it is handled. A flexible catheter may pass into the bladder, but its walls may not be strong enough to prevent it from collapsing, from the pressure which it has to sustain between the cervix and the symphysis pubis. Again, a flexible or any other kind of catheter is liable to have the fenestrum plugged; consequently, it should always be blown through before it is introduced. After its introduction, particularly in difficult cases of the kind under consideration, the fenestrum may become stopped up with lymph, blood, mucus, epithelium, and amorphous or even crystalline deposits from the urine; to prevent which, the catheter ought to be introduced full of some thin, limpid oil, and it should be passed into the bladder as far as possible, without giving unnecessary pain, in order to get free of any deposit. If the urine fails to come away, suction by the mouth or otherwise ought to be applied to the outer extremity; if these means fail, the catheter should be slowly withdrawn, revolving it at the same time on its long axis; by doing so, the fenestrum may be taken from resting on the sides of the bladder, and more fully exposed to the body of the urine. The best catheters for the purpose are Nos. 8 and 10, flexible (for males), and a flattened silver one from six to eight inches long, slightly curved, and with a single fenestrum on the concave surface.

Change of position will often facilitate catheterism in these cases; from the left side the patient may be placed upon her back, in the position for the operation of lithotomy, so as thoroughly to relax the abdominal muscles; or she may with equal advantage be placed upon her elbows and knees. In this position, steady pressure exerted on the uterine tumour *per rectum* will facilitate the introduction of the catheter, particularly if the os or any portion of the cervix uteri is projecting above the symphysis pubis. In any case of catheterism attended with difficulty, there ought to be no hesitation in exercising the faculty of vision, in which case the use of chloroform will serve the triple purpose of relieving pain, relaxing tissue, and sparing the feelings of the patient. If the bowels are found to be loaded, or if they have not been moved for two days, a stimulating enema should be administered, or, as that is often impossible, a smart saline purgative should be given. Such steps may facilitate the introduction of the catheter by obtaining more space; but it should never be forgotten, that the quieter the rectum is kept, the easier will the operation of reduction be performed, particularly in recent or sudden cases of retroversion, where the bearing-down efforts are already a sufficient hinderance to the exercise of the taxis. As soon as the bowels have moved, or in those cases where their evacuation is thought unnecessary, a suppository containing half a grain of morphia should be introduced into the rectum; within half an hour thereafter, the tenesmus and bearing down efforts will have ceased, and catheterism or reduction will be much more easily accomplished.

Let us suppose catheterism to be impossible, the pain violent, and the danger from over-distension imminent, what should we do? Whilst the bladder is over-distended it would be extremely injudicious to attempt reduction; and although it succeeded in Mr. Weir's case by the aid of great force, I consider such a practice quite unjustifiable with our present knowledge of the subject. The risk of rupturing the bladder is all but certain; and I feel confident that in Mr. Weir's case it was only prevented by the accidental discharge of a considerable quantity of urine which took place during the exercise of the taxis, an occurrence which cannot always be relied upon. What, then, are we to do, if foiled in relieving the bladder by the catheter?

We have only two alternatives, namely, to puncture the bladder or produce abortion. Of two evils we ought always to choose the least; and for my own part, if the patient will submit to the operation, I have little difficulty in selecting *paracentesis vesicæ* as the one to be preferred. It was successful in Dr. Cheston's case (*Medical Communications*, vol. ii), and I have no doubt it would have been equally so in Mr. Lynn's, where it was refused (*Medical Observations and Enquiries*, vol. iv). In the following cases the operation of tapping the bladder was never thought of, and I feel certain that it would have saved the lives of most of them; namely, Dr. Carmichael's of Port Glasgow (*Annals of Med.*, vol. iv); Mr. Baynham's joint case with Dr. Lee of Birmingham (*Edin. Med. Jour.*, 1830, p. 266); Professor Doeveren's of Groningen (Merriman's *Dissertation*); and Dr. Bell's of Kelso (*Medical Facts*, vol. viii). In Mr. Wall's joint case with Dr. Hunter, I cannot help thinking that it might have saved the patient if it had been done when first detected. My reasons for recommending this operation before the production of abortion are: 1. By abortion the fœtus is necessarily lost, whatever method we may adopt to bring it about. 2. The usual methods of inducing abortion have been found next to impossible, unless nature had already commenced the operation. 3. Granting that the usual measures could be used, they are much too slow in producing their effects to be of any value in a dangerous case of retention of urine, twenty-four and ninety hours sometimes elapsing before uterine action can be developed. There is only one method of producing abortion to which there is no objection on the score of delay, namely, tapping the liquor amnii, if possible through the os uteri, if not, through the uterine walls, as in Mr. Baynham's case. By such means the uterine tumour is lessened, the pressure on the urethra is removed, the bladder may be emptied, and the uterus reduced, but the fœtus is lost; and the operation is in no way less dangerous to the patient, or more difficult to perform than *paracentesis vesicæ*. I quite agree with Mr. Baynham that *paracentesis uteri* should be limited "to cases in which the replacement shall be found impracticable after the bladder has been emptied" (*Edinburgh Medical Journal*, 1830, p. 261); and with the still stronger language of Dr. Campbell, that "with regard to the comparative merits of these three expedients (puncturing the bladder, section of the pubes, and tapping the liquor amnii), the preference must certainly be given to puncturing the bladder" (*Edinburgh Journal of the Medical Sciences*, vol. ii, p. 340). As to the best method of performing the operation of *paracentesis vesicæ*, a hydrocele, or recto-vesical trocar, should be introduced through the *linea alba*, from one two inches above the symphysis pubis, with or without a primary incision; the direction of the point in ordinary cases in the male is downwards into the cavity of the pelvis; but for obvious reasons, in cases of retroversion of the gravid uterus, it should be backwards and upwards towards the promontory of the sacrum or the last lumbar vertebra. The retention of the cannula must be guided by circumstances; if the operation of reduction fails after the urine is withdrawn, it ought unquestionably to be retained, unless a catheter can then be passed into the bladder. If the patient is thin, the cannula should penetrate at least two inches; if fat, not less than three or four inches.

Having emptied the bladder, how are we to proceed? Dr. Ramsbotham recommends an interval of thirty-six or forty-eight hours to elapse before attempts are made at reduction (*Obstetric Medicine*, 3rd edit., p. 627). In a later publication already alluded to, he seems inclined to extend this interval to two or three days, in the hope that the restoration might be effected spontaneously (*Medical Times*, Oct. 23, 1852). For my own part, I object to such delay for reasons already given. If the preliminary steps have been taken, if the bladder has been emptied, and the bearing down efforts subdued by opium or chloroform, the sooner the displacement is reduced the better. Should there be any difficulty experienced in returning the uterus by the use of the taxis, if possible, the bladder ought to be kept empty by the use of the catheter, twice if not thrice in the twenty-four hours. In many cases the uterus will rectify itself if this is attended to, particularly before the fourth month, the pelvis being large or the uterus diminutive. If inflammatory symptoms are present, as a rule, they should be combated by appropriate treatment before proceeding to the use of the taxis.

[*To be continued.*]

Original Communications.

REMARKS ON OBSTRUCTION OF THE BOWELS: WITH CASES.

By Edward Copeman, M.D., M.R.C.P., F.R.C.S., Physician to the Norfolk and Norwich Hospital.

Among the multifarious subjects which both interest and perplex the medical practitioner, not the least important are those of *constipation* and *obstipation* of the bowels; by the former of which terms I mean costiveness and difficulty in evacuating the bowels, and by the latter, the total inability to perform the act of defecation. My own experience assures me that either of these affections may terminate fatally, and that the latter is one of the most unmanageable diseases we have to contend with. Case after case defies the most attentive observation of the physician to detect the precise cause of the symptoms, and case after case proves the utter uselessness of his most strenuous and persevering efforts to afford relief. After death, the cause of the difficulty is in many instances disclosed; but so far from the cause being always of the same nature, it is found to be subject to the greatest variety, although the symptoms are always very much the same; and it appears to be next to an impossibility to predicate during life what a *post mortem* examination will discover. Neither, in any given case can we tell with certainty at its commencement, whether it will turn out to be *constipation* merely, or *obstipation*; and this uncertainty precludes, and very properly too, our entertaining, at so early a period of the case, any mode of treatment which may risk the life of the patient. On the other hand, if we allow the case to go on so long that we have been able to convince ourselves of the impossibility of overcoming the obstruction by *medical* means and appliances, we shall generally find that a state of disorganization of some of the abdominal viscera will have supervened, which, in all probability, will render surgical interference nugatory and inefficient. In no instance can it be shown that a correct diagnosis of disease is of more vital importance, and in none can this be more difficult to attain. Another great misfortune in regard to these cases is, that a defective diagnosis, or a wrong one, may lead to treatment that materially aggravates the danger; and when once the error has been committed, it can scarcely with any probability be rectified. For instance, should any given case of obstipation be considered, and treated, as one of simple impaction, and purgative medicines be freely administered, the attempt thus to urge on the contents of the bowels aggravates the mischief which is going on at the seat of the obstruction, and hastens the fatal issue. I believe, however, that in all cases, whether of simple impaction or of organic constriction, it is unsafe to persevere in the exhibition of purgative medicines; and that in cases which are curable, we shall attain our end more satisfactorily by allowing time for the action of moderately powerful medicines, than by too great an anxiety to "force a passage" by active and vigorous measures. The early symptoms in all these affections, are of a very similar nature, and there is generally a similar previous history connected with them. The patient is usually of a costive habit, and refers to several instances in which more than ordinary difficulty had occurred in getting the bowels relieved. Then suddenly there comes on a pain in some part of the abdomen, sufficient at first to cause sickness; and perhaps vomiting occurs once or twice, followed by temporary amendment. Some aperient medicine is then taken; but as it is not found to answer, a medical man is sent for, who gives perhaps a full dose of calomel followed by salines and senna, and probably by enemata, either simple or medicated. The result of this will most likely be either an evacuation of fluid matter from the bowel without relief to pain, or no evacuation at all; and then follow other symptoms which, to an experienced practitioner, give rise to serious apprehension. The abdomen becomes distended, tympanitic; the countenance looks anxious; there is a feeling that nothing but relief from the bowels can do any good, and the patient will make repeated attempts without success. The pulse becomes more feeble, but as yet there may be no great degree of sympathetic fever; the tongue may be clean, or very little furred, and the pulse not much increased in frequency. This is the most anxious and important period of the complaint; now is the time when treatment will be successful or otherwise; the next stage is one of peritoneal inflammation or intestinal disorganization, and then scarcely a hope will be left of saving life. Should it be a case of impaction only, it is possible that clearing the rectum of hardened fæcal matter if it be found there—persisting in the use of plentiful soap and water injections sent through a long tube as far as possible into the colon, applying warm fomentations and poultices to the abdomen (and leeches, if there be much tenderness); a strict adherence to a liquid diet, and the exhibition of mild unirritating or oleaginous aperients combined with henbane or conium, may be followed by satisfactory evacuation of hardened lumpy scybalous fæces, and security, for the time, to the patient. If a careful management of the bowels, and the frequent use of gentle medicine, as small doses of watery extract of aloes and rhubarb, or ox gall, be afterwards ensured, there may perhaps be no recurrence of the symptoms.

But should it be a case of obstipation, what then? It may be caused by a stricture of the rectum; by stricture of the ileum from a band stretched across or around it, either congenital or the result of a former attack of inflammation; by disease or displacement of the sigmoid flexure of the colon; by the escape of fæcal matter into the *appendix vermiformis* with subsequent inflammation and sloughing of that extraordinary part of the animal economy; by intussusception of some portion of the intestine; by peritoneal inflammation; by a foreign body impacted in some portion of the intestinal canal; and there may be other causes, such as cancerous and other abdominal tumours. All these I have myself observed, and with respect to their fatality, there is but little to choose between them. Still, were it possible to arrive at a correct diagnosis, there cannot be a doubt that surgery might, in many instances, step in as an auxiliary or handmaid to medicine; and, if resorted to in good time, save the life of the patient. In the case of stricture of the rectum, opening the colon might afford time and opportunity to treat the stricture, and if not malignant, with success. And here I venture to state my opinion, that it is not from malignant stricture that fatal obstruction generally occurs; for the process of ulcerative degeneration which takes place in such diseases has a tendency to keep the canal pervious, and the patient dies of the cancerous cachexia and repeated losses of blood. In the case of stricture caused by a band passing over or around the intestine in any part of its course, if it *could* be ascertained, an operation would, in all probability, be now and then successful; for it does not appear from the experience of military surgeons, that cutting into the peritoneum is so dangerous a proceeding as civilians have generally considered it. But how is it possible to ascertain this state of things before death? Nothing can be more difficult; but in the absence of stricture of the rectum within reach of the finger, in the absence of bulging in the left lumbar region, with distension of the coils of the small intestines, and with pain between the umbilicus and spinous process of the ileum, I should be greatly inclined to advise an incision being made external to the epigastric artery, and an exploration of the bowel near the seat of the termination of the ileum in the cæcum, with the hope that any discoverable cause of strangulation there might be successfully overcome. Inflammation of the *appendix* from the presence of fæcal matter must be fatal unless nature chanced to save life by the formation of a fæcal abscess; and the same may be said, I think, of intussusception, unless nature accomplish the removal of the invaginated portion of intestine by causing sloughing and separation of the strangulated part into the canal which includes it.

But suppose an operation determined upon for the relief of stricture of the rectum, or suspected stricture anywhere else, with bulging in either loin; where should it be performed? Is it better to open the descending or the ascending colon? At first sight it would appear preferable to make the opening into the bowel as near as possible to the termination of the canal; but, on reflection, I am not inclined to coincide in this opinion. In a case which occurred recently under the care of my colleague, Dr. Ranking, the stricture was in the rectum near the promontory of the sacrum, and was sufficiently dilatable to admit of the passage of an œsophagus tube both before and after death. All treatment, however, failed; and on examining the abdomen after death, there was no general peritoneal inflammation, but the *cæcum and ascending colon* were in a state approaching perforation from sloughing; and if the descending colon had been opened by an operation in the left loin, it must have been entirely useless, for there was no great accumulation there, and the opposite side was the seat of the secondary mischief. Now it is my firm conviction, that whenever obstruc-

tions occur in the course of the large intestines, the accumulation will take place in the cæcum whether from inflammation or paralysis of that portion of the bowel, or from regurgitation; for the effect of obstruction lower down would be, during peristaltic action, to cause the contents of the colon to regurgitate until they were stopped by the ileo-cæcal valve, and they would necessarily accumulate in that portion of the gut which is not only the most capacious of the large intestines, but that in which its contents would have to encounter the opposing force of gravitation. I am inclined, therefore, to think that whenever the colon is opened, unless a large hard mass of fæcal matter can be felt on the opposite side, it would be better to operate on the *right* side, and this for several reasons. 1. The operation is not at all more difficult on this side than on the other. 2. Here it is that accumulations and inflammations most usually take place. 3. An artificial anus in this situation would not be so inconvenient as on the left side, because the contents would neither be so fæcal, nor so offensive at the commencement, as they would at the termination of the large intestines.

The following interesting case occurred at the Norfolk and Norwich Hospital, in a patient admitted under my care; and never was there a more striking example of the difficulty of forming a correct diagnosis during life—of the strong efforts to live on the part of the courageous sufferer—and of the inutility of the most anxiously conducted treatment, accompanied, as it was, by the most unrestricted opportunities of carrying into effect whatever means could be devised by the whole staff of the Hospital to rescue the poor man from an untimely death. The condition of things brought to light by the *post mortem* examination, shewed how impossible it was to have given relief by the remedies used, or perhaps by any others; and teaches the great and valuable lesson that we ought never, in a conjectural science like that of medicine, to be vain in our own imagination, nor unduly impressed with our own powers of judgment and discrimination. It teaches us also to pay all proper respect to the opinions of those who differ from us, and to persevere humbly and steadily in our attempts to unravel the mysteries and difficulties which continually beset our path. I will venture to affirm that no practitioner is disposed to take a more humble view of his own capability, than he who has had the longest and best opportunity of witnessing and treating disease; the effect of long experience and study generally being to dispel much of the assurance we possessed as tyros in our profession, when we were led to jump at conclusions which subsequent practical knowledge has shewn to have been premature and untenable.

CASE I. *Constriction of the Ileum by a Fibrous Band: Operation for Artificial Anus; Death.* Thomas Gibbs, aged 36 years, a shoemaker, living in Norwich, now of temperate habits; but about ten years ago, being then a soldier, he used to drink freely. He was one of three children; his father died of what was said to be abscess in the kidney; his mother was still alive and healthy. He was admitted into the Hospital, November 24th, 1855. His countenance was pale and anxious. He was not emaciated, but said he had lost flesh within the last few days. Fifteen years ago, he had a severe attack of small-pox; and some other kind of fever about twelve years ago, whilst cruising in the Pacific. Since that time he had had two or three attacks of severe pain across the epigastrium and abdomen, but no constipation. On the previous Thursday morning, he found that on attempting to pass a motion he had great difficulty; and was attacked soon afterwards with pain, more or less severe, in the abdomen, with almost continual vomiting. Medical advice was called in; and purgatives, castor oil, etc., and injections were administered, but he kept getting worse, and came to the hospital on Saturday afternoon. When admitted he had a warm bath, and in the evening, injections of warm water and olive oil. He said the last time he had a proper motion was on Tuesday. On examination by the finger, no fæces were to be felt in the rectum; but on forcing the finger as far as possible, what appeared to be an incipient stricture might be felt. A middle sized tube was then passed and appeared to enter the stricture. An injection was thrown up, and afterwards some olive oil; and this was repeated several times with no better result than the bringing away a few *débris* of fæcal matter. To all appearance the tube did not bend. A draught composed of chloric æther and laudanum was given every hour or two; and turpentine stupes were applied to the abdomen, which was very hard and tense, as well as somewhat swollen. The pain was increased by pressure, but the pulse did not indicate peritonitis, 100, feeble and small. The tongue was white and slightly furred, but moist. He was passing urine freely; was troubled with flatus; but had no hiccough.

Nov. 25th. Another injection was given, but with no good result. The pain was not increased; his general condition was much the same as yesterday.

Nov. 26th. By manipulating the abdomen, fæcal matter mixed with fluid might be heard, "rumbling." He vomited frequently; several pints of warm water were thrown up through a tube; after which, several small lumps of fæces came away, accompanied with flatus. He afterwards took some wine and kept it down.

Nov. 27th. He had a bad night, rejecting almost everything he had taken; and this morning he stated that both the matters vomited, and the flatus escaping from the stomach, were very disagreeable and offensive. Pulse nearly imperceptible. The countenance was anxious. Attempts were made this morning to inject fluid, but it entered only the pouch of the rectum, and returned as injected. Fluid mixed with air could be felt and heard in the situation of the cæcum, and there was a general fulness in the course of the descending colon also.

7 P.M. He had been vomiting all day, the ejecta having a very fetid smell. The pulse was very small and indistinct. A consultation of the medical staff was now held; and, after careful deliberation, it was determined to open the descending colon in the left loin. The operation was performed by Mr. Norgate, by making an incision about four inches in length, midway between the last rib and the crest of the ileum. The abdominal parietes being divided, and a portion of fat removed, the bowel was reached and opened, but no fæces escaped. The bowel was secured to the sides of the wound in the usual manner; some lint was put over the opening, and the man removed to the ward. One ligature only was required, the hæmorrhage having been very slight. A little chloroform was now and then administered during the operation, but not enough to produce insensibility. He was vomiting nearly all the time of the operation.

Nov. 28th, 4 A.M. He was sick about half an hour after the operation, but not since. Warm flannels had been constantly applied to the body.

11 A.M. Vomiting recommenced at eight o'clock. He had taken nothing but a little bread and milk. No fæcal matter had passed either from the anus or from the wound. The pulse was stronger and better. The tongue was cleaner, and he said he felt better. The abdomen was as much swollen as ever. Warm water was injected through the wound, but only a few small pieces of fæces came away.

9 P.M. Injection was again used through the wound and by the rectum. Water injected downwards by the wound, came out at the anus. Sedative mixture was ordered to be given occasionally.

Nov. 29th. He was weaker and vomited stercoraceous matter. What appeared to be the transverse colon was greatly distended and filled with fluid and air. A tube was passed in at the wound as far as it could be safely pushed upwards, (about six inches) and touched fæcal matter, but when an injection was thrown up, no motion came away. A current of electro-galvanism was passed through the body as a *dernier ressort*, but with no good effect.

10 P.M. He was much the same. Another fruitless attempt was made to empty the colon by injection.

Nov. 30th. He was restless all night. He had passed some air *per anum*. There had been no vomiting from 10·30 till six A.M. He was evidently weaker, and his cheeks were flushed. He stated that when the galvanism was applied, he felt "something turning over inside his bowels;" and several times in the day he felt air moving about in the bowels.

11·30. A.M. His tongue was quite clean this morning, and his pulse not worse than yesterday; indeed, better than before the operation. The countenance was not unfavourable, but no fæces escaped through the wound. The urine still passed freely. He was galvanised again this morning.

Dec. 1st. He was sick twice during the night; the quantity ejected was but small. He had taken two biscuits, five ounces of sherry in water, and a jelly, in the night, and some bread and milk for breakfast, which he retained. The tongue was clean; the pulse 120, more feeble than yesterday. The urine was high-coloured. He said he had no pain; but his countenance was again anxious, and he appeared to be gradually sinking.

Dec. 2nd. He had been vomiting stercoraceous matter all night. The pulse was weaker. The tongue clean. The upper part of the abdomen was very much distended, and a question arose as to what portion of the canal presented such an amount

of distension in the epigastrium. Two were of opinion that it was the transverse colon; another, that it was the small intestine; and two others, that the swelling was caused by wind in the stomach. To clear up the last point, it was suggested that an œsophagus tube should be introduced into the stomach; but on doing this, the swelling neither diminished in size, nor did any flatus escape. A liniment, composed of olive oil, laudanum and turpentine, was rubbed upon the abdomen. At six P.M. another consultation was held, at which it was determined that no further operative proceeding should be attempted, as the patient was evidently in a dying condition. Shortly afterwards he passed urine; also several scybala, of the size of walnuts *per anum*. In the night he died, and the nurse informed me that just after death, a large quantity of fluid fæcal matter escaped by the wound.

Post Mortem Examination made on December 3rd, about twelve hours after death. On opening the abdomen, it was found that the great protuberance across the body from the left to right hypochondrium was occasioned by distended coils of *small* intestine, adhering to each other by recent lymph. A large quantity of fluid, similar to that which had escaped through the opening in the left loin immediately after death, was found in the peritoneal cavity, from which cavity the above mentioned fluid had escaped through the wound, and not from the bowel itself. In the right iliac region, under where a blush of redness and some œdema had been discovered before death, there was evidence of considerable inflammation and sloughing of intestine; and a large quantity of fæcal fluid had collected in the *right* lumbar region between the cæcum and abdominal wall, as if nature intended to form a fæcal abscess there. The fatal lesion was in the *ileum*, about five inches from the ileo-cæcal valve, where it had been constricted by a band passing over it, apparently from the mesentery to the brim of the pelvis; several inches of this part of the ileum were in a sloughy condition and its coats had given away so as to allow its contents to escape into the peritoneal sac, the immediately surrounding parts being also in a sloughy condition. The cæcum and its appendix were healthy; and the termination of the ileum for about three inches from the valve was also normal. The ascending and transverse colon were empty or nearly so, *and lay concealed and collapsed under the distended coils of small intestine*. There was no stricture or impediment in the descending colon or rectum, but each contained a small quantity of fæcal matter of the consistence of putty. It was attempted to pass a tube by the anus into the sigmoid flexure, but without success, as it was impeded by the curve of the sacrum, and would not take the turn of the bowel in that direction. We also tried to pass the same instrument into the transverse colon through the wound in the left loin, but it was found as impracticable after death as it had been before; and it was clear that more forcible attempts would have perforated the bowel, as there was a portion of the colon at about the distance from the wound to which the finger and instruments had been fruitlessly passed before death, which seemed to have very little more than its peritoneal coat to prevent its being opened into the cavity of the abdomen. The dissection was rendered very difficult and tedious by the extent to which disorganisation had taken place, but was most carefully and effectually accomplished by the assistant surgeon (now surgeon) Mr. Cadge, whose anatomical knowledge and experience in dissection are well known and appreciated.

Case II. *Fatal Case of Obstipation from Constricted Ileum.* Mr. —, aged 32, an active healthy man, chiefly employed as a shepherd, had been labouring under obstruction of the bowels several days, when his surgeon requested me to see him. I visited him in consultation on March 1st, 1854, and found him suffering from peritoneal inflammation in an advanced stage. There was redness of the integuments, as well as some œdema, over the situation of the ileo-cæcal valve, with dulness on percussion, indicating serious mischief within. He had been leeched, and treated with calomel and opium freely, but there had been no relief from the bowels since the commencement of his illness. He had now some colocynth and henbane pills, and a dose of castor oil.

I did not see this patient again until the evening of the fifth, when I found him in a state of collapse, moribund. There had been no relief from the bowels, the redness and œdema remained, and there was evident fulness in the right iliac and lumbar regions. A question was raised as to the propriety of opening the cæcum, but his depressed powers forbade the performance of any operation. He died the next morning; and, on examination after death, it was discovered that the termination of the ileum was the seat of destructive inflammation, the bowels being glued together and to the omentum, under which there was a considerable quantity of serous fluid, causing the dulness and fulness in the lumbar regions. The cause of all this fatal mischief was a membranous band encircling the ileum, and constricting it so tightly as to cause complete strangulation, and almost sphacelus to the extent of several inches. The *cæcum and colon* were *empty and collapsed;* showing how totally unavailing must have been any such operation as that at one time contemplated, even had it been performed at an early period of the disease!

[*To be continued.*]

SCROFULOUS DISEASES OF THE EXTERNAL LYMPHATIC GLANDS:

THEIR NATURE, VARIETY, AND TREATMENT.

By P. C. Price, Esq., Surgeon to the Great Northern Hospital; the Metropolitan Infirmary for Scrofulous Children at Margate; etc.

III.—Tuberculous Disease of the External Lymphatic Glands.

[*Continued from p. 915.*]

Mercury. Long before iodine was used as an antiscrofulous agent, even in the form of burnt sponge and various calcined sea-products, mercury had enjoyed an unequivocal reputation. From the earliest period it had been prescribed, with universal consent; and we have only to look back a few years into the history of medicine, to see how unconditionally this mineral was administered for all kinds of glandular enlargements. At one time it was exhibited in its pure state, as quicksilver; but with what advantages, the writings of ancient authors fully acquaint us. As calomel, it obtained most unenviable reputation as a *specific* for all kinds of glandular affections, and was oftentimes used in the same reckless way as for syphilis. As might be expected, this potent drug, in the hands of the inexperienced and ignorant practitioner, constantly did more harm than good; and the less inclined the glandular affection seemed to yield to the efficacy, or rather to the inefficacy, of the remedy, the more strenuously was it pushed, in the vain, but, alas! strongly implanted hope, that resolution would in time be effected. It was no uncommon event for individuals in a state of advanced tuberculous disease not only of the glands of the neck and other parts, but also of the lungs, to be salivated, not once, but frequently, in the belief that the sure virtue of the mineral would sooner or later be established.

But calomel was not the only salt of mercury that was in use. The bichloride, or what was formerly termed the submuriate, introduced by Van Swieten, was supposed to possess even stronger control over scrofulous affections, and especially those of tuberculous formation. Wiseman prescribed enormous doses of this salt, which were administered at night-time, and continued for an indefinite period. A single grain was not an uncommon dose for a child, which, as admitted by an able writer, acted "forcibly on the bowels of children, and often on the stomach too; sometimes producing a very distressing languor for the whole of the following day."

There can be no doubt that such practice tended greatly to diminish in the estimation of intelligent surgeons the reputed virtue of this and other preparations of mercury; and therefore it is not astonishing to find the same author, from whose works I have just quoted, stating that "in scrofula as a constitutional disease, these and all other preparations of quicksilver are very much less useful than they are commonly reported to be; nay more, unless I am very much deceived, the incautious use of them will remarkably aggravate such scrofulous affections as are present, and even give rise to others, which possess all the characters of scrofula, and yield to anti-scrofulous remedies." (Henning, *op. cit.*)

This salt was used generally in the light of a deobstruent; and, although we have freely acknowledged the injudicious way in which it was very commonly employed, still it is satisfactory to be able to admit that now, in some instances, it is employed with good effect. Perhaps, the late Dr. Plummer was greatly instrumental in procuring its moderate administration by associating it with guaiacum, sulphur, and antimony. When mercury is now administered, it is generally in the form of this pill, or as the liquor hydrargyri bichloridi (*Phar. Lond.*). My own experience militates against the acceptance of the drug as an active and trusty agent in the resolution of glandular en-

largements from progressive tuberculous formations; and, although I sometimes deem its offices of value, I cannot say that I am in the habit of prescribing it. I have but one opinion regarding the general use of mercury in scrofulous disease, although it may be modified by peculiarities of special cases. I believe that the less frequently it is administered, in the light of a specific, the more satisfactory will be the therapeutical management of the disease.

Mercury and chalk, in the form of hydrargyrum cum cretâ (*Phar. Lond.*), I have already spoken of as a valuable medicine, in the light of a purgative and alterative, although it is impossible to advocate its more potent qualities as a resolvent in the treatment of tuberculous glands.

To the use of the iodide and biniodide of mercury I have already referred. Of the latter salt, Dr. Nevins says, after having tried it in the treatment of glandular affections, "my own experience of it is not favourable; it has exerted little influence, good or bad." (Translation of the *London Pharmacopœia*, J. B. Nevins, M.D., 1851.)

Iron. Very early in the treatment of scrofulous glands, the exhibition of various minerals, whose chief action consists in restoring tone to the stomach and constitution, received the attention of surgeons. Among the most generally esteemed of such preparations are those of iron. They are not administered with the view of exercising any special action in the reduction or amendment of the glandular mischief, but to give health and tone to the impoverished and debilitated state of system which usually obtains in scrofulous diseases. When associated with iodine, as already mentioned, the combination is one of the most useful at the disposal of the surgeon. The salts most generally in use at the present time are those of the carbonate, sulphate, and tincture of the sesquichloride of iron. The former, as ferri carbonas cum saccharo (*Phar. Lond.*), in two to twelve grain doses, is a valuable and useful preparation, although I prefer the tincture of the sesquichloride as a general rule, given in small but repeated doses, either in water, in combination with a mineral acid and quassia, or in effervescing draughts when feasible.

Baryta. Many years ago, Hufeland introduced into practice the muriate of barytes, and for a very considerable time the medicine was held in high repute as a positive resolvent of glandular enlargements, and few authors ventured to write a treatise on the management of scrofulous glands without lauding its wonderful properties. I have had no personal experience worth recording of its usefulness; but Lebert says that he never saw the least effect produced even by its most careful and determined exhibition. Balman, however, who has written a practical treatise on *Scrofulous Diseases of the External Lymphatic Glands*, states that he is disposed to entertain a very favourable opinion of its efficacy, particularly in chlorotic, cachectic, and other cases, attended with a languid circulation and much debility.

Potash, etc. Liquor potassæ has long been vaunted an almost infallible specific for the reduction of tuberculous glands in certain stages by those who support the alkaline treatment of the affection. There is no doubt that it is of value in reducing chronic glandular enlargements; for I have frequently known it of decided benefit. Its combination with iodine has already been considered; and I believe that the action of this drug is oftentimes much increased in virtue by association with a greater or lesser quantity of the alkali. It is difficult, however, to lay down any fixed rule for its administration. I have never treated a case of clearly incipient or more advanced state of tuberculous affection of the lymphatic glands solely with liquor potassæ, and therefore am not in a position to speak more definitely as to its right to be considered an infallible agent in the treatment of this form of disease.

Sodium. The same remark will apply equally to sodium and those compounds which have been already but partially adverted to. With regard to the chloride of sodium, or common salt, it has been supposed that it exerts a special influence over the progress of scrofulous glands, owing principally to the fact that many cases of glandular mischief are greatly benefited by sea-water, which at one time was enthusiastically recommended as "a sure and certain cure for struma", when drank with assiduity and faith for a considerable period. I have only to add, that I never advise such a plan, although I have known a great many scrofulous patients, sent to Margate from various parts of England, indulge freely in the imbibition of this plentiful beverage, believing that its curative effects were well established and of certain fulfilment. I can assure those of my inland readers whose belief in the virtues of the German Ocean is not probably so sincere, that many is the scrofulous patient, old and young, who, before quitting the bathing-machine, quaffs in faith a considerable quantity of the briny liquid. It is but fair, however, to add that such constancy to so plenteous a cup is in a measure due to the generally received notion that iodine to a considerable amount is held in solution.

Lime. Lime in various forms once enjoyed great repute for the supposed direct effect it produces on the suppurative stage of glandular tuberculosis. Extolled far in advance of all combinations was the muriate or chloride of calcium. At one time it was reckoned a specific, but met with its partial downfall after Mr. Goodlad had given it a fair trial. "I can say", writes this intelligent writer, "little in its praise; for I think, in at least one hundred cases, I was not able to distinguish one which amended from the use of it, where the amendment could not otherwise be satisfactorily explained." (*Op. cit.*) It will be presently seen, when considering the effect of remedies on advanced stages of tuberculous disease—the ulcerative and suppurative—that this and other lime-salts may really exert some material influence not only on the economy, but also on local sores, etc.

Many years ago, when I had barely commenced the routine of professional study, a German practitioner came to Margate to make various inquiries regarding the influence of the climate of the town in preventing and curing scrofulous diseases, and I remember that he attributed no small share of the virtue of this health-restoring sea-port to the water that was drank by a large proportion of the inhabitants, which contains large quantities of lime-salts. This water, which is unusually *hard*, I analysed; but regret that I cannot put my hand on the quantitative determination I made of it at the time.

It is a very common practice with many medical men to administer to scrofulous children large proportions of lime, in the form of liquor calcis, or lime-water in combination with milk. I have known this treatment succeed admirably on many occasions, especially where there existed any distinct derangement of the osseous system. How far such a drink is influential in procuring resolution of affected glands in every stage, is open to doubt; but I believe it is certainly sometimes of advantage in the later stages of tuberculous degenerations.

But the lime-salt which has gained of late considerable repute is the hypophosphite, introduced by Dr. Churchill for the treatment of pulmonary consumption. Although opinions differ as to the merits of this preparation in the cure or amendment of phthisis,* still there are many who are eager to record their praises in favour of its virtue in scrofulous disease of the osseous system. In such I have known it of great value; and I can also strongly advise its exhibition in cases of tuberculous glands, particularly when associated with scrofulous affections of the bones. It may be given in five, ten, or twenty grain doses, in milk or other fluid, once or twice a day. Children who have an aversion to medicine do not mind taking it. What its introducer has said regarding its effect on pulmonary disease may, in a great measure, be made applicable to tuberculous affections of the lymphatic glands. There can be no doubt that it materially assists the resolution of varying forms of scrofulous degenerations, hastens the cessation of suppuration, and promotes the cretefaction of tubercle when such a change seems imminent. I have found much advantage from its use, and can confidently recommend it as a valuable adjunct in the hands of those whose attention is devoted to the treatment of scrofula.

I have for some time been in the habit of prescribing lime-salts in combination with iron and iodine, with apparently very beneficial results. A preparation containing distinctive proportions of phosphate of lime, iron, iodine, etc., has been made for me by Mr. Gould, chemist, of Oxford Street (under the name of liq. ferri phos. comp. c. iodinio); and I am quite certain that material benefit has resulted from its use in several instances. In one case, that of a young gentleman who had enlarged glands of the neck (early stage of apparently tubercular infiltration), great advantage accrued from its persistent use during two to three months; and I have been induced to make a continuous trial of it at the hospitals with which I am connected. It is, however, extremely difficult to prevent the early occurrence of decomposition and precipitation of the lime. There are also other various preparations containing different proportions of phosphate of lime and iron which have lately received much attention.

* See a very practical paper on the use of the hypophosphites, etc., in the treatment of phthisis, by Dr. Quain, in the "Lancet", March 17th, 1860.

I have pleasure in referring to a very interesting paper from the pen of Mr. Samuel Gale, published in the *Chemical News* for March 17th, 1860, in which are described many excellent preparations of phosphate of lime, soda, etc., in combination with iron, manganese, zinc, etc.; and, although I am not an advocate of all the medicines herein detailed, still there are some which are well worthy the consideration of practitioners. Among these may be mentioned the syrup of the phosphate of iron and lime and the syrup of the phosphate of iron. The former has obtained great renown both in America, where it is largely consumed, and in this country. It is known to the public under the term of "chemical food", as it is stated to contain all the elements necessary to revivify the constitution when harassed by scrofulous diseases. It is used by all chemists, but is obtainable only from America. I can specially recommend the preparation of Messrs. Squire of Oxford Street, and Mr. Fincham of Baker Street; and advise it to be taken in concert with some effervescing draught, as that formed by the combination of equal parts of tartaric acid and bicarbonate of soda, whereby the sweet taste of the syrup, which forms a compulsory portion of the medicine, is much and agreeably disguised. The dose for a child is about one teaspoonful. The improvement gained by the use of a limited course of the syrup is oftentimes most marked, and I could record many instances of strumous affections which have been greatly benefited by it.

Gold, Manganese, etc. Of the former of these minerals I have had no experience, as regards its boasted virtues over tuberculous glands. The latter is much used, especially in Scotland, as a tonic; and, as such, is very useful, in combination with lime and iodine, in the management of tuberculous diseases.

[*To be continued.*]

CASES OF POISONING BY MONKSHOOD (ACONITUM NAPELLUS.)

By T. Ogier Ward, M.D., Winkfield.

Having lately had an opportunity of witnessing the poisonous effects of aconite on four persons in the same family, I think the facts observed are worth recording, particularly as the symptoms differed in each patient, and that one suffered from most decided tetanus, a feature not hitherto recognised, as far as I can find, except in cases of poisoning by strychnia. If I recollect aright, all the medical witnesses for the prosecution in Palmer's case contended that the tetanic symptoms of his victim could only have been caused by some form of strychnia, and therefore the refutation of such an erroneous assumption is a matter of extreme importance in a medico-legal point of view.

A lady, of middle age, had made a gallon of mixed pickles, and her eldest daughter, on tasting it a few days after, did not think it hot enough; and going into the garden, dug up about 1 lb. of what she took to be horseradish, which she cut in pieces, scraped, and added to the pickle-jar. The next evening, she and her mother partook of the pickles at supper, at 9 P.M., and went to bed. About 12 o'clock, both were taken ill; the mother with vomiting and purging; but the daughter first felt numbness at the tip of the tongue, extending to the base, with a sensation that it was swelled; rigors, with great depression, and a feeling of extreme illness. She got out of bed, and went to tell her brother in the next room, who brought her mother to her, who begged her to return to bed; but by this time she was so paralysed that she could not get into bed without assistance. Knowing that her mother was ill, she lay quiet some time, but thinking she was dying, begged to be taken to the window, which was done; and now she found that, with a feeling that her eyes would drop from their sockets, she had lost her sight, and her jaw dropped so much that she was obliged to have it tied up. She was again carried to bed, and a medical man was sent for, who gave the mother a draught with tinct. opii, supposing it a case of English cholera, and soon relieved her, so that she was well by morning, having eaten but little of the pickle, and having probably vomited that little. The daughter, however, remained much in the same state at intervals during the night and following day.

At 12 N. the next day, the second daughter, aged about 18, who has long suffered from anomalous dyspepsia, eating but little, and that little chiefly salads, pickles, and other piquant but innutritious food, made herself a salad of lettuce mixed with the pickle, and afterwards drank about a teacupful of the vinegar in which the aconite had now been steeped for thirty-six hours. At one o'clock the eldest son came into dinner, and also partook of the pickle; and shortly after remarked to his mother that there was something not right in the pickle, as his mouth "filled with water so." This aroused her suspicions; and going into the garden, she found that the roots of the aconite, growing near some horseradish, had been taken for it. On her return she found the second daughter ill, and gave the alarm, at which the elder was so distressed that she jumped out of bed and ran out of the house to call for assistance. Fortunately, the medical man, with a friend, was coming towards the house, and picked her up in the road, where she had fallen exhausted, and carried her back, and then sent to my house for some zinci sulph. as an emetic. Half an hour afterwards, having heard that the family had taken poison, I went to see if I could be of service, when I found that the emetic had taken good effect. Orders having been given to help the patients in exercise, the son was being walked about. He had a depressed, heavy look, his face being rather livid, and he staggered about as if he were drunk, complaining that his legs felt swelled, and too heavy for him to lift them. The numbness about the jaws continued, with occasional attacks of extreme depression and faintness, during which the face became livid, and the pulse very feeble. I had taken some ammonia and ether with me, and these with brandy were freely given, but without any apparent effect, till he became sick, when he began to rally; and after this, when the depression came on, the stimulants were exhibited less freely, so as not to load the stomach, and by bedtime he had nearly recovered. The second daughter was suffering, and looking like her brother, but much worse. She also became sick, but without the same beneficial result; and the attacks became more frequent and severe, being attended with tympanitis, pain round waist, convulsive movements of the legs, the hands being benumbed, cold, and clenched; the pulse slow and scarcely perceptible, and she seemed about to expire. During one of the several attacks, the pulse became imperceptible at the wrist, and only audible by the ear to the chest; and then, instead of convulsions, she had complete trismus and tetanus; the hands being clenched, the arms fixed, the jaws tightly closed by the rigid masseters, and the head and trunk retracted, till she only touched the couch with her head and heels. From this time the paroxysms retained their new character, but gradually became less violent till about midnight, when she could be left with safety. The elder sister seemed to suffer more from the effects of terror and anxiety than from the poison, and the mother was quite sufficiently recovered to assist in the treatment of her children. The next (the third) day, the eldest daughter had a severe attack of pain in the stomach, for which she was obliged to be treated medically. The younger sister and her brother both suffered from severe pain in the spine, with great debility, and it was several days before they were quite well. None of the four, except the mother, had spontaneous vomiting and purging, and none passed any urine during the severity of the attack. The respiration, if affected at all, was only slightly accelerated. The elder sister never lost her senses; the younger recollected but little of which occurred during the more violent attacks.

Remarks. It will be observed that the mother, who took but little of the pickle, had only vomiting and diarrhœa, and was quite well the next morning. The elder daughter suffered from numbness of the tongue, rigors, depression, loss of power in her limbs, amblyopia, and gastric irritation; but neither vomiting nor purging. The younger daughter had numbness of the tongue and jaws; tightness round the waist; fits of extreme depression, with clonic convulsions passing into trismus and opisthotonos; and loss of consciousness, followed by severe pain down the spine. The brother had numbness of the tongue, salivation, torpor of limbs, and similar attacks of depression as his sisters, followed by pain in spine. I omitted to mention that the youngest daughter, aged 14, ate some onions out of the pickle for supper, but suffered no inconvenience from them.

The action of aconite is local, as indicated by the numbness of the tongue in three of these cases, but its virulence and duration seem to depend on the form in which it was taken; thus, the elder daughter and the son ate the solid root, and in the one it caused gastric irritation, even on the third day; and the son continued to suffer from pain in the spine as long as his younger sister. She had not eaten much of the solid root, but had drunk a quantity of the vinegar, hence, from the complete absorption of the poison, the extreme violence of her symptoms, and also their quicker subsidence; for, except the

pain in the back, which may be ascribed in part to the opisthotonos, and the consequent stiffness of the muscles, she was convalescent the next day. The mother only suffered from the local irritation of the stomach and bowels, no doubt because she got rid of the poison very speedily by vomiting. Trismus and convulsions are mentioned by Christison as occasional symptoms of poisoning by aconite, but not tetanus; yet the opisthotonos and trismus were as well marked, and came on in paroxysms as distinct, as in traumatic tetanus, or in any of the cases of poisoning by strychnine hitherto published. Hence, I consider this is a very important case in its medico-legal bearing; for if there had been only one patient, and the symptoms had not been traced to the pickle, and if death had recurred, the same doubts would have arisen as in Palmer's case; no strychnia could have been discovered by a *post mortem* examination, though the symptoms indicated it; and most probably the real poison would have escaped detection, from having been all absorbed with the vinegar by the stomach and bowels.

Transactions of Branches.

READING BRANCH.

TRANSACTIONS OF THE READING PATHOLOGICAL SOCIETY: ANNUAL RETROSPECTIVE ADDRESS.

By Nathaniel Crisp, Esq., Swallowfield.

[*Continued from p. 920.*]

III.—Brain and Nervous System.

Trismus Infantum. Mr. Harrinson mentioned the particulars of a case of tetanus infantum. The baby, a third child, began to ail when 5 days old, at which time the cord separated. The child had previously been doing well. Two days passed over, during which premonitory symptoms existed, and then all the phenomena of this most horrible malady (requiring to be seen but once to make an indelible impression on the memory) were fully and severely marked. Mr. Harrinson drew such a graphic description of the appearance produced by a tetanic paroxysm that I feel justified in quoting his words. He mentions "the wrinkled forehead; the elevated brow; the closed eye; the dilated nostril; the rigid masseter; the fixed jaw; the closed mouth; the corrugated lips; the bubbling saliva; the retracted head; the shortened neck; the starting cervical muscles; the turgid veins; the arched spine; the raised chest; the troubled breathing; the catching diaphragm; the heaving abdomen; the separated arms; the squared elbow; the bent wrist; the clenched fingers; the incurved thumb; the extended and separated legs; the bent down toes; the livid surface; the whole figure rigid; a pitiful sight." Such is the description; and truly a tetanic patient ought to excite all our pity. Hydrophobia excepted, I know of no disease so melancholy in its aspect. The little sufferer in this case lived for ten days. Nothing abnormal during life or after death was to be detected beyond a suppurating condition of the abdominal portion of the cord. The treatment consisted in nourishment, assafœtida, magnesia, and syrup of poppies.

Mr. Harrinson remarked on the rarity of this form of tetanus, as compared with former days, and also drew attention to the fact of tetanus not invariably arising from external injury and concluded his paper by quoting authorities in support of this affection being a blood-disease, expressing his hope that ultimately it would prove one of the most tractable disorders of its class; a hope in which we may all share, but which will not, I fear, be realised, at least in our day.

Pathology and Treatment of Tetanus. These observations lead us to the consideration of the true nature of and treatment for tetanic disorders. Is tetanus a zymotic or blood disease? or does it spring from some special affection of the nervous system? Advocates for both views are to be found. Dr. Richardson and Mr. Spencer Wells are in favour of Mr. Harrinson's ideas; the former thinking that the tetanus is in traumatic cases due to the formation in the wound, during the healing process, of a special albuminous product, which being absorbed, acts in the blood as a ferment, and so sets up the usual train of symptoms. This is an ingenious supposition, but as yet quite unproved. Much danger may arise from too strongly upholding such views, and at the same time beneficial results may be anticipated from not too doggedly adhering to the generally received notions of this disease. We must remember that nothing certain is at present known in support of either theory. Life is at issue in a most urgent and painful manner, and great will be the boon conferred, should any one in or out of our profession discover the real cause of the disease. Then we may hope to be able to treat it more successfully. Arguments in favour of the blood or zymotic origin of tetanus may be adduced from some points of similarity between it and zymotic diseases in general. Out of a large number of cases which I have seen, a few of which have survived, I cannot call to recollection one in which it could be certainly said that a cure had been effected. The remedies used may have alleviated pain, abated spasm, supported strength, and prolonged life, thus enabling the patient to outlive the storm; which is, I think, the most we can say. Is not this the case with zymotic diseases in general? Do we cure any of them (unless we except ague)? Much less fatal in their tendency than tetanus, they run their course, and the patient more frequently recovers. What do we cure in fever? We check diarrhœa should it arise; we calm the excited cerebral functions where delirium exists; we keep up the drooping powers when exhaustion occurs; and so we prevent our patient from dying; but is this a cure? I think not. The same may be said of the exanthemata in general; and so they bear a similarity to tetanus; the poison has exhausted itself; no more pabulum is left for it to feed upon; and the disease passes off. Tetanus is at times, to a certain extent, epidemic; so are zymotic diseases. The earlier a case occurs during the existence of an epidemic, the more severe is it likely to prove. The most virulent forms of tetanus are such as supervene the most rapidly after an injury. A softened portion of spinal cord, or an inflamed nerve, is occasionally found in connexion with tetanus. May we assume this to be an effect, not a cause of the disease, like the ulcerated intestine of fever, the eruption of small-pox, the rash of measles, or the blotchy syphilitic skin? Zymotic diseases are, many of them, not prone to recur in the same individual. Has tetanus any such tendency? I am afraid the cases of recovery are so few and far between, that no data can be formed; still it is a point not devoid of interest and perhaps of practical utility. These are some points which appear to me favourable to the advocates of zymosis. On the other hand, strong proofs may be adduced in support of the nervous origin of this disease. The spinal cord is now and then found softened: in one case which I examined, this was very apparent. Nerves in contact with an injured spot are seen disorganised and inflamed. According to Erichsen, this is nearly always, if not constantly, the case; and he brings forward in support of this many instances gathered from a large experience. The injuries most frequently followed by tetanus, are mostly such as implicate parts freely supplied with nerves; as the thumb, the great-toe, or, we may say, the hand or foot. Curling says, that out of one hundred and twenty-eight cases, sixty-four arose after such injuries; but, at the same time, we must bear in mind how peculiarly exposed to severe injuries are these portions of our frame. Next to such accidents as these, those which involve the cutaneous surface, as burns, are the more frequently followed by this disease.

The removal of an injured finger or toe has been followed by good results. This appeared to be the case in one instance I saw, in which recovery took place after amputating a sloughy finger, or rather the remains of it. Why should a wound when cicatrising be more likely to be associated with tetanus than at another time? unless from a nerve being irritated and involved in the contracting cicatrix. The fact which is undoubted that no relief is afforded in a large number of instances by operative measures is but of little weight. A disordered condition of the nervous system once established is very likely to continue long after the exciting cause has been removed. Nerve-structure is of such delicate organisation, that it is as easy to conceive of changes rapidly and unappreciably established pursuing their course to their termination, as to accredit the blood with such a power. Larrey (I think) conceived the idea, that an injury to the front or back of the body was followed either by opisthotonos or emprosthotonos; if such should be the case, no blood-poisoning would account for this peculiarity. But whether or not this be a fact, why should the spasms in one case mostly involve the dorsal, in another the abdominal, and in another the lateral muscles of the trunk, unless the nerves are especially implicated? If we are to give credence to cases reported, in which tetanic symptoms were developed, and death ensued within a few minutes of the receipt of an injury, we must seek a cause elsewhere than in the blood; more especially if an albuminoid principle is to be produced, act as a ferment, and evolve a poison similar in its effects to strychnia, as Dr. Richardson supposes.

The remarks I have just made refer more especially to the traumatic form of this disease; and to this I consider that tetanus infantum belongs, the ligatured umbilical cord being the injured part. Idiopathic tetanus differs much; fortunately it generally results in recovery; and certainly appears a disease often produced by such causes as are supposed to be productive of zymotic diseases in general. This induces me to refer to the views advocated, I think, by Mr. Spencer Wells, as to the double nature of tetanus; one form being due to a blood-poison, and the other arising from peripheral nervous irritation; one constituting the idiopathic, the other the traumatic variety. Some such view as this is the one I feel much inclined to adopt. I certainly cannot attribute this disease entirely to the blood without many misgivings; and cannot help considering that, as yet, proofs weigh heavily on the side of the nerves being the *fons mali* in traumatic cases, while perhaps the blood is at fault in idiopathic.

In the treatment of tetanus, two or three grand points must be kept in view. We must endeavour to keep the victim alive by nourishment and stimulus administered with no sparing hand. If possible, any supposed exciting cause must be removed from connexion with the nervous centres, by amputation or dividing nerves communicating with the injured part; or if it be from intestinal accumulations, or worms, by purging. Seek to allay spasm by sedatives, and of these cannabis Indica is one not to be neglected. I certainly have some faith in its powers. Quinine in large doses is also an admirable remedy, acting probably both as a sedative and as a tonic. Aconite is another remedy, after the use of which, good results have occurred; and just lately the "*woorara*" has been used with sufficiently good effects to justify further trial. The hypodermic administration of remedies has been used; and by it sleep has been induced, but no observable effect produced in allaying the spasms. In such a disease as the one under our notice, where so much difficulty is experienced in introducing remedies into the system, any such plan has strong claims in its favour.

Sanguineous Apoplexy. Mr. George May presented a specimen of sanguineous apoplexy. The subject was a young gentleman, 18 or 20 years of age, who, whilst out hunting, was attacked with severe headache, speedily followed by convulsions, apoplectic symptoms, and death in five hours. A very large effusion of blood was found spread over the base of the brain, and extending into the spinal canal. No lesion of the cerebral structure was detected, and the vessels appeared intact. The patient had been subject to headache from infancy. This case is interesting, on account of the early age at which apoplexy occurred, and the extensive and rapid effusion of blood, with no detectable lesion. All who knew the subject would have said that he was a very unlikely one for apoplexy. A friend of his informs me that the day previous to his decease he had been practising jumping and sustained a fall. Could this have been the cause, some minute vessel giving way, and only waiting its opportunity to bleed freely, which occurred when the circulation became accelerated by active horse-exercise? Might not a hæmorrhagic diathesis promote such an issue?

Diagnosis of Mental Diseases. Dr. Burnett read a very interesting paper on the diagnosis of mental diseases. As this is to be published,* I must content myself with briefly referring to the chief points dwelt upon by him. Amongst them was the difficulty that exists in distinguishing between the delirium of mania, and that of arachnitis; which difficulty is much increased when they exist together. The pulse is the great guide in mania, generally being much accelerated; this is also the case in puerperal mania. The occasional subsidence of pulse during the twenty-four hours is one of the most favourable signs of recovery; on the other hand when no such subsidence occurs, an unfavourable issue is invariably to be anticipated.

Several interesting cases were narrated in support of these views.

Dr. Cowan suggested whether the rule regarding the pulse would not hold good in most cases of disease.

Fractured Spine. Mr. Moxhay exhibited a specimen of fractured spine at the third and fourth dorsal vertebræ. Death ensued in three days—a happier termination than the more prolonged but horrible one which ensues when the injury is lower down.

Encephalocele. Mr. Vines exhibited the cast of a child's head, who was five weeks old at the time of death. A large tumour projected from the occiput. The baby was feeble, and unable to suck, and efforts at swallowing produced convulsions. In size the tumour measured nine inches in vertical circumference; it was covered by the occipital portion of the scalp and below that by the skin of the neck. Beneath these were attenuated cerebral coverings. The cerebellum composed the greater portion of the tumour: its interior containing about two ounces of straw-coloured fluid. The cerebellum had escaped from an opening in the centre of the occiput, about three quarters of an inch across, apparently due to defective development of osseous matter.

Mr Pound referred to a case of a similar nature, which was associated with spina bifida.

Mr. George May quoted authorities to prove that such cases occur only at the fontanelle; but this, I think, is not always the case, true osseous deficiency at times being found. If spina bifida is occasioned by deficiency of the vertebral laminæ, why should not the cerebellum at times escape through a hole in the occiput itself? For, after all, what is this bone but a superiorly developed vertebra? An interesting case of congenital spinal bifida came under my notice during the time I was house-surgeon to the Bristol Royal Infirmary. The tumour was very large, situated about the junction of the lumbar and sacral regions. It existed in a man between 20 and 30 years of age, married, and the father of a family. It had hardly ever occasioned him inconvenience, except from its size; and on some occasions cerebral disturbance ensued after a blow on the tumour. Latterly, the skin had become thinner, and began to ulcerate, for which he sought relief. Ultimately, the skin gave way; a very large amount of fluid escaped, followed by much faintness and cerebral disturbance. This frequently occurred; and he sank at last, apparently from exhaustion. This case is remarkable for the length of time it existed, and the little inconvenience occasioned, especially considering the very large size of the tumour.

[*To be continued.*]

* This paper was published in the Journal for August 4, 1860.

Reviews and Notices.

A Year-Book of Medicine, Surgery, and the Allied Sciences, for 1859. Edited by Dr. Harley, Dr. Handfield Jones, Mr. Hulke, Dr. Grailly Hewitt, and Dr. Odling, for the New Sydenham Society. Pp. 536. London: 1860.

The first prospectus of the New Sydenham Society, issued early in 1858, declared that one of the objects of the Society was the publication of "A Year-Book of Reports in Abstract of the Progress of the different branches of Medical Science, compiled by a Committee." After the lapse of more than two years, the book appears, heralded by the announcement made in the last summer that there would forthwith be published a Year-Book, "designed to form a Register in condensed Abstract of all Important Communications, whether British or Foreign, in Medicine, Surgery, and their Allied Sciences, during the year 1859." How keenly, in the interval, the mental appetites of the members of the Society must have been excited! With what eagerness they must have looked forward to this promised feast of the good things of medical literature—a feast, in which the viands were to be so skilfully prepared, that with the utmost variety there should coexist the most judicious condensation of nutritive material! We, with others, in fact expected to receive a concentrated essence of the medical literature of 1859, containing all the nutritive properties of the original material in so perfect a state as to leave, after its ingestion and digestion, a wholesome feeling of having been filled with good things.

But what has been the fact? After partaking of the feast thus offered to us, we have risen from it with our cravings unsatisfied—nay, often only tantalised; and, still worse, some of the food has been so improperly prepared, that it has been positively nauseous. In plain words, the *Year-Book* has fallen very far short of the expectations we had been led to form of it from the ability which has characterised the previous pro-

ceedings of the New Sydenham Society; and it is not in one point alone that this failure is manifested.

In the first place, the *Year-Book* is not that which it professes and ought to be—a "Register in condensed abstract of all important communications." We have taken the trouble of collating the book with some of the principal medical periodicals for the year 1859, and have arrived at a result which we scarcely expected. A great number of articles, even amounting to the majority in some of the journals, are altogether unnoticed—reference is not even made to them in the bibliographical lists at the commencement of the sections. Here is a list of some of the omissions.

From two numbers alone of the *American Journal of the Medical Sciences* for 1859, the following articles are omitted.

Woodward. Several articles on the Histology of Cancer.

Lente. Carbuncular Inflammation of the Lip.

Mitchell. Effect of Alcohol, Glycerine, Water, Gum, Ammonia, and the Vacuum, on the Exposed Hearts of Frogs, etc.

Hammond. Observations on the Colourless Blood-Corpuscle.

Lockwood. Fracture of Base of Cranium followed by Recovery.

Chopin. Modified Extension Apparatus for Fractures of the Leg.

Da Costa. Effect of Respiration upon the Position of the Heart.

Gilbert. Adhesive Plaster in maintaining Counter-Extension in the Treatment of Oblique Fractures of the Lower Extremity.

Bell. Fiske Fund Prize Essay, on the Effect of the Use of Alcoholic Liquors in Tuberculous Disease.

From the *North American Medico-Chirurgical Review*, the following articles are omitted.

Storer. Criminal Abortion.

Gross. Treatment of Aneurism by Digital Compression.

Packard. Present State of Microscopical Science.

Ayres. Congenital Exstrophy of the Bladder successfully treated.

Armor. The Character of Green and Melænal Discharges from the Bowels.

We also seek in vain for notices of the following papers, continued in the *Dublin Quarterly Journal of Medical Science*.

Butcher. Reports in Operative Surgery.

Kelly. Compound Dislocation of Carpus.

Smyly. Compound Fracture of the Patella.

Osborne. Involuntary Action of Voluntary Muscles.

Richardson. Pathological Researches on various subjects.

Cusack. Treatment of Aneurism by Compression.

From the *Journal de la Physiologie de l'Homme et des Animaux*, the omissions are also numerous, as the following list will shew.

Guyon. The Cavity of the Uterus.

Broca. Hybridity.

Brown-Séquard. Action of Light, Heat, and Cold, on the Iris.

Davaine. Development and Propagation of the Tricocephalus and of the Ascaris Lumbricoides.

Martin-Magron and Buisson. Nux Vomica and Curare.

Chauveau. Physiological Effects of Electricity.

Van Kempen. Transmission of Sensation and Motion by the Spinal Cord.

Robin. The Capillaries of the Brain.

Brown-Séquard. Influence of Change of Climate on Animal Heat.

Malherbe. Action of the Auriculo-Ventricular Valves; and the Sounds of the Heart.

Gluge and Thiernesse. Reunion of Sensorial with Motor Nerve-fibres.

The editors of the *Year-Book* have then failed to notice no fewer than thirty-one articles, contained in four journals. These are the only journals which we have examined: for we fear that, if we continued our task, the list would reach a most formidable length; and, even in the case of the four periodicals above-named, we have not enumerated several of the minor articles. What can be the meaning of this remissness on the part of the editors? It cannot be that the papers to which we have referred are of too small importance: for there is not one of them which is not at least of as much scientific and practical as many of the articles noticed in the *Year-Book*. What, for instance, is the meaning of the omission, in surgery, of all allusion to Mr. Butcher's Reports in Operative Surgery? Or, in medicine, of the passing over of Dr. Armor's researches on Green and Melænal Discharges? Or of the apparent ignorance displayed by the Reporter on Legal Medicine, of the elaborate essay of Dr. Storer on Criminal Abortion? The explanation is difficult, and any one may make it as he best can: but the fact remains.

So much for what is *not* in the Year-Book. Let us now turn to what *is* in it. The work is arranged in five departments, each entrusted to a separate Editor.

The first Department, entitled the Institutes of Medicine, includes reports on Anatomy, Physiology, Histology, and Animal Chemistry; and is, in the words of the Editor, Dr. Harley, "an epitome of science applied to practical medicine."

The second department, edited by Dr. Handfield Jones, contains the Reports on Pathology, Therapeutics, Clinical Medicine, and Psychiatry.

In the third department, compiled by Mr. Hulke, are the reports on General, Aural, Ophthalmic, and Dental Surgery.

The fourth department is devoted to Midwifery and the Diseases of Women and Children, and is edited by Dr. Graily Hewitt.

The fifth department, edited by Dr. Odling, includes Legal Medicine and Sanitary Science.

In each of these departments, there is an arrangement of the subjects under appropriate heads. So far, good; but when the reader wishes to find what has been written on any given subject, he must not unfrequently wade through the whole of the articles under the general heading, sometimes extending over several pages, before he can be sure that he has overlooked nothing. If, for instance, he wish to consult the literature of diphtheria, he will find, at pp. 138-141, a list under the head of "Diseases affecting the General System." At p. 139, is the first notice of his subject—Diphtheritis of Traumatic Surfaces; then come an article on Gout and one on Variola; then three on Diphtheria; then articles on Iodide of Sodium, Chronic Alcoholic Intoxication, Continued Fevers, Syphilisation, Putrid Infection, Selenite as a Febrifuge, Small-pox with Syphilis, Mercury and Syphilis, and Ague; then two articles on Diphtheria; papers on Typhus, Intestinal Fever, Syphilis; four references to Diphtheria; Simultaneous Existence of Diseases, Scrofula, and Report of the Vienna General Hospital; Diphtheria: Continued Fever, Yellow Fever, Constitutional Syphilis, Malarious Affections, Rheumatic Fever, Quinic Intoxication in Rheumatism; Diphtheria; Acute Rheumatism; Diphtheria; Scrofula and Tubercle, Beri-beri, Syphilis, Mucous Tubercles, Syphilisation, Urinary Excreta in Ague, Statistics of Cancer, Action of Solanine and Dulcamara; and, lastly, Diphtheria.

Is not this a most disorderly arrangement—if arrangement it can be called? In such a publication as a Year-Book, all notices of any given subject ought to be placed together, so that the reader might at once see when he had reached the end of them. It is true, there is an elaborate Index, which we have pleasure in praising; but most of those who use the book would, it is likely, prefer that some further care were taken in arranging the abstracts in such order as to prevent the necessity of a constant reference to the index.

We pass by without comment some very curious orthographies and equally curious translations; but we must dwell for a few moments on the literary style of the work. All have heard of the ambiguous responses of the ancient oracle; and most of our readers probably remember the famous reply to Pyrrhus—

"Aio te, Æacida, Romanos vincere posse."

Some of the Editors of the Year-Book may vie with the Pythian priestess. Here are a few choice sentences from the Report on the Institutes of Medicine.

"Brown-Séquard says that the only difference between arterial and venous blood is in its containing more oxygen and less carbonic acid" (p. 32). What contains more oxygen and less carbonic acid?

"Vulpian confirms the existence of a peristaltic action in the ureters. His experiments were mostly made upon animals rendered insensible by woorara. The peristaltic action continues even after the ureter is separated from the kidney, which proves that it is not the stimulus of the urine which calls it into action." (p. 104) Calls what into action? the peristaltic action? the kidney? or the ureter?

"Paul Broca lately read a paper on the treatment of tetanus by woorara to the Surgical Society of Paris. He began by giving a *résumé* of the literature of the subject, and then entered upon the question as to the best mode of administering it." (p. 108.) Administering what? the subject? the literature? woorara? or tetanus?

The Editor of the Report on Surgery also is often equally infelicitous in his style.

"Flemming illustrates the dangers of forcible and unskilful catheterism by two cases of extravasation of urine following the formation of false passages, and narrates the case of a child with remittent fever who had complete retention of urine during twenty-four hours. The urine contained a flocculent precipitate, probably lithate of ammonia. Its scrotum and prepuce were much swollen." (p. 301.) Scrotum and prepuce of what? The pronoun "who," implying personality, has already been applied to the child.

"Leroy reports a case of traumatic stricture, which was twice treated by division through the perinæum; a relapse, attended by threatening symptoms, followed each operations, which was the 'boutonnière' performed without a guide." (p. 302.)

"Quinlan treated a case with a seton of eight threads of iron wire. The inflammation was as great as usually follows the treatment by iodine-injection, which he had undergone two years previously for a hydrocele of the left side." (p. 306.) Are we to understand that Quinlan had undergone treatment by iodine-injection?

It is not too much to expect that the compilers of such a publication as a Year-Book should take care, in condensing the various articles, to put the abstracts in the clearest shape, and to avoid every form of expression which may cause the least ambiguity. But here we meet with an utter disregard of some of the first principles of good English composition—with, especially, a most reckless use of the neuter pronoun, which, as may be seen in several of the sentences we have quoted, and in others in the book, may be assigned at pleasure to any one of two or three antecedents. "Every one will know what is meant," it may be argued. Perhaps so—even Mrs. Gamp can be understood: but editors of a Year-book should write grammatically, so as to be comprehended at once, and not in a style which, if they were schoolboys, would render them worthy of the honours of the birch.

We must now draw our distasteful task to a close. Rarely, if ever, have we been more disappointed in the perusal of a book of which we had formed high expectations. The work of editing the *Year-Book* has been performed, in many respects, in a manner unworthy of men professing to have received a liberal education; and the book is far from being a credit to the Society under the direction of which it has been issued, especially as the promises have been great, and the previous performances meritorious. When the Council of the New Sydenham Society next undertake the issue of a Year-Book, care must be taken that the work shall be a *bonâ fide* report on medical science for the year indicated, written in good English and well arranged, and not such a slovenly production as that which has lately usurped a place among the publications of the Society for the present year.

British Medical Journal.

SATURDAY, DECEMBER 1st, 1860.

HOMŒOQUACKERY IN LIVERPOOL.

It is so long since we have heard anything of our homœopathic friends, that we really had forgotten they existed; but that they are alive, we have the testimony of the *Liverpool Mercury*, which chronicles the fact that on Monday last the first new building devoted to a Dispensary conducted on homœopathic principles was opened in Liverpool. You should not put new wine into old bottles, says Holy Writ; and the new faith, after a tremendous struggle during the last twenty years, has at length raised for itself an elegant retreat in a back street in Liverpool! We are informed that the style of the new building is plain and unpretending; it bears upon its Hardman Street front a granite tablet, inscribed "Founded in 1841". There is a spacious hall, filled with a heroic sized statue of Hahnemann; spacious waiting-rooms; and a dispensary fitted with an abundant supply of water! We will not dwell upon the neat and not gaudy style of the new establishment; it is clear its promoters have not sufficient money to throw away upon florid ornamentation; but they certainly exhibited a large share of the article in their speeches made at the banquet which took place after the opening, the attendance at which was certainly homœopathic. "Where were Drs. Chapman, Ramsbotham, Atkin, Ryan?" asked the chairman; and echo answered, "Where?" The absence of these great leaders was accounted for, later in the evening, in a very natural manner. The patients were too many for the physicians, and the latter were consequently so overworked that they could not find time to come! According to the ordinary laws of supply and demand, this unfortunate paucity of practitioners following the new light should not continue. The bare announcement of the fact ought to be sufficient of itself to determine a flow of young and enthusiastic medical men to the shrine of the great homœoquack. But no; we find that Dr. Drysdale, like a great many persons in the *Times*, has a want. "We require", he tells his audience, "a constant succession of new converts among the profession, and young medical men fresh from the schools turning to homœopathy." Really, we were not prepared for this cry of new converts wanted! We thought the wretched old allopathic edifice was crumbling to pieces; and that its votaries were fast forsaking it, as rats are said to desert a sinking ship.

But it may be that, after all the flourish of trumpets respecting the triumphant march of globulism, there is a screw loose at Liverpool. Can it possibly be that there is a lack of patients as well as of medical converts? and that Dr. Drysdale and his friends have begun to build just when his tenants have determined to give up their occupation? Alas! we fear there is some truth in our suspicion; for, on consulting the statistics

of the dispensary we find that, whereas in 1857 4,616 new patients were admitted, and 22,256 prescriptions were made up (the water-rate must have been unusually heavy that year), in 1859 the number of patients had dwindled to 3,867, and the prescriptions to 20,202!

Dr. Drysdale, it is true, explains away this awkward fact very philosophically. "Conversions to new truths do not take place in a regulated manner, but often seem to stand still for long periods, and then again suddenly numbers follow each other rapidly. For these reasons, corresponding fluctuations must be expected in the apparent success of the undertaking we are all interested in; but these need give rise to no sense of discouragement, or dim in any degree the hopes of the final triumph of homœopathy, which I do not doubt will ere long become the leading principle of rational medicine." Our friends the homœopaths have been so long indulging in the boastful vein, that this new style of encouragement to their innocent followers is quite refreshing. If Dr. Drysdale had been a general, he would have conclusively proved, to his own satisfaction at least, that every retreat was in fact a forced march, and that ultimate victory must be the consequence of running away.

Dr. Drysdale is not much happier, we must confess, in his mode of illustrating his arguments than in his method of encouraging his hearers. For instance, this is his account of the first spring made by homœopathy in Liverpool. In 1841, the Dispensary

"Consisted only of one doctor, two rooms, and one signboard, but as yet no patients. For a time things looked discouraging, and the great difficulty was to make a beginning. Soon, however, a circumstance occurred which showed remarkably how those erred who underrated the intelligence of the working classes. A mechanic happened to be passing along the street, when his attention was attracted by the board, and the word 'homœopathic' roused his curiosity. He went home and consulted his dictionary, but could not find it there; so next day he came to the dispensary to inquire, and finding that it was a medical term, *he discovered also that he was ill, and submitted his case.* The result was that ultimately he got more than he came for—namely, his mind was enlightened on the meaning of homœopathy, and his body lightened of the ailment that had burdened it."

And this anecdote is put forward as an instanee of the intelligence of the working classes! To our minds, it tells quite the other way; for this simpleton, who seems, like many of his betters, to have been taken in by a fine name, immediately discovered that he had a complaint to match it. We are not surprised at homœopathy striking its roots among such "intelligent" working men as this one appears to have been.

But Dr. Drysdale was by no means the only hero of the occasion. Mr. Lewis, announced as a working-man, although he protested he was not a model working man got up for the occasion, set forth the virtues of homœopathy in a totally new light; the new doctrine not only was wonderful in its effects upon the bodies of the patients, but also upon the minds of its practitioners! "All of whom endeavoured to do their duty in a manner characteristic of both gentlemen and Christians;" whilst, on the contrary, the allopaths deceived whilst they administered their nauseous medicines to children, and in this way learned to practise falsehood! We are afraid the workingmen of Liverpool will not be proud of their spokesman at the homœopathic banquet; at all events, we trust medical men practising even this quackery will ask themselves if a creed which condescends to accept the support of such arguments as were given on this occasion, can be worthy of the support of educated men.

Association Intelligence.

COMMITTEE OF COUNCIL:—NOTICE OF MEETING.

A Special Meeting of the Committee of Council will be holden in the Lecture Theatre, Cannon Street, Birmingham, on Tuesday, December 4th, at 1.30.

Business:—Election of Editor, and management of the Journal.

Philip H. Williams, M.D.,
General Secretary.

Worcester, November 26th, 1860.

Editor's Letter Box.

RELIGIOUS INTOLERANCE IN THE RADCLIFFE INFIRMARY.

Sir,—In the *Oxford Chronicle* of the 17th of November is an advertisement for candidates to fill the office of House-Surgeon to the Radcliffe Infirmary, requiring that he shall be a member of the Church of England, as well as a member of the Royal College of Surgeons, and of the Society of Apothecaries. Does membership of the Church of England presume that a man must have been baptised, confirmed, and have taken the sacrament of the Lord's Supper at least four times in the year, as commanded in the twenty-third Canon, and that he attend the Dominical services, and the feasts and fasts of the Church? It is as well to understand what is the meaning of being a member of the Church of England. Never having heard that such a religious qualification is considered necessary in any of our metropolitan or provincial hospitals and infirmaries, it took me greatly by surprise why this exception at Oxford should be the rule of selecting a medical officer to the Radcliffe Infirmary. Is a physician or surgeon more or less fitted to exercise his profession because of his creed? Is the rule founded on monastic, corporate, geographical, or ecclesiastical peculiarities? so that a surgeon who is fit to be a house-surgeon in Edinburgh or Paris, is unfit at Oxford, unless he have the double qualification of membership of the Church of England and of the College of Surgeons. The rule savours strongly of priestcraft,—of the old leaven of religious intolerance and persecution.

The Royal Colleges of Physicians and of Surgeons of London, Edinburgh, and Dublin, do not claim the right of exacting from their candidates their religious creed or faith. They proclaim that they who have passed their medical examinations are fitted to practise and teach the art and science of medicine; they do not demand whether a candidate is a member of the Church of England; whether he assents and consents to each and all the Thirty-nine Articles; the doctrines of the Prayer-book, the Homilies, and Canons; or to the Augsburg Confession of Faith. Do the Governors of the Radcliffe Infirmary really believe that adhesion to the Thirty-nine Articles will enable the house-surgeon to set a limb, to extract a stone, and to do his duties to the sick, in every respect, better than if the peculiarity of his metaphysics should tempt him to doubt whether the Articles are in strict accordance with scripture? The science of medicine is not fettered by the formularies of churches and sects: it is the same under every clime and country; it owes no allegiance to lords spiritual and temporal; to kings, or priests, or pope; it has for its basis the truths of philosophical investigation, and its object the alleviation of human sorrow, pain, and infirmity. Any gentleman of right moral principles, common humanity and industry, will fulfil the duties of his office, whether his creed be Anglican, Presbyterian, Catholic, or Independent. A few years ago the legislature abolished the Test and Corporation Acts; Catholic emancipation was carried; and recently the Jews have been admitted into Parliament; the whole constituting a series of progressive enactments to establish the great, just, and generous principle that "*No man shall be prejudiced in his civil rights by reason of his religious creed.*" The healing art extends its

godlike blessings to all alike,—to the Jew and Gentile, to rich and poor, to bond and free. Its maxims are—

"Homo sum, humani nihil a me alienum puto."
"Tros Tyriusve mihi nullo discrimine agetur."

The good Samaritan did not hesitate to give balm and oil to the wounded man; he did not first ask whether he belonged to the same or different sects of the house of Israel; whether he was Samaritan, Sadducee, or Pharisee. The Holy Gospel sanctions no special claims as appertaining to, nor confers miraculous gifts of healing on, any favoured disciples or sects of men, but bestows its bounties alike to the tribes of Levi and Judah, to the stranger within and without the gate, to the Jew and Gentile. If our northern stars of the Presbyterian church, if the Hunters, Bells and Monros, the Symes or Millars of Edinburgh; if Dupuytren, Velpeau, or Ricord; Scarpa, or Tiedemann, and countless others who have adorned science and surgery, were to offer themselves as candidates for the house-surgeoncy of the Radcliffe Infirmary, they would be rejected! They are not orthodox in the hallowed precincts of Oxford!

Did the liberal Sultan exclude from his armies and hospitals the Christian dogs, the English and French doctors? The Mussulman has shown a more enlightened philosophy than the Christians of Oxford; the Koran was not insisted upon, though the Thirty-nine Articles must be. Let us learn a brilliant example from the pious benefactor, Sir Jamsetjee Jejeebhoy, who built and endowed a hospital at Bombay for the sick poor of all nations: he did not impose the Parsee faith on the surgeons of the hospital. Who succoured the stricken and destitute Syrians? The philanthropist Jew, Sir Moses Montefiore, and his philanthropic coadjutor, the amiable and pious Quaker, Dr. Hodgkin.

Sauntering round the new beautiful Museum of Natural History at Oxford, I was delighted to see statues dedicated to the memory and honour of the immortal men of all ages, nations, tongues, and religions—a Walhalla of genius! In a Byzantine building, the primitive style of the architecture of Christianity, are statues erected to Hippocrates, the father of medicine; to Aristotle, the mighty Stagyrite, the father of natural history; and to his disciple of a later age, the celebrated Cuvier. Linnæus and Priestley, Davy and Dalton, are there, who have shed lustre on the kindred sciences of medicine, botany, and chemistry. There is Leibnitz, the rival of our heaven-descended Newton; and there Watt and Oersted, who have revolutionised the world by their discoveries in steam and electricity; and there is the persecuted Galileo, imprisoned by cruel and ignorant priests, because his celestial discoveries did not harmonise with the religious dogmas of the ruling ecclesiastical polity of the age. Are not these statues suggestive of generous emotions? There are illustrious Pagans, Catholics, Anglicans, Presbytertans, Unitarians, Quakers, and Independents, brought together in the great temple of science. The worshippers of an unknown God, the believers in the ancient oracles, Christians of different denominations, are here honoured as the chosen vessels of intellect. The Thirty-nine Articles and the canons have no supreme rule in this sanctuary of mind.

The requirements of the candidates for the Radcliffe Infirmary are incompatible with the age in which we live; such requirements are exploded in Catholic Belgium, France, and now in Italy, in America, and in Turkey; they are unbecoming a liberal, an enlightened, a Christian country. It is unworthy of the Governors of the Radcliffe Infirmary to impose a religious restriction on any medical officer who is otherwise fitted for the duties of his office; and it is earnestly hoped that the Governors will rescind that obnoxious requirement, will conform to the more generous and just tendencies of the times, and give that right of religious freedom to others which they claim for themselves.

I am, etc.,
R. W., *Physician to a Hospital.*

November 28th.

THE SECRETARY OF THE ROYAL COLLEGE OF SURGEONS.

Sir,—I observe with much pleasure, as I am sure a vast number of others must do, that the Council of the College of Surgeons has voted two hundred guineas out of the funds of the Institution, for the purpose of presenting a piece of plate to their long tried, trusty, and right worthy secretary, Edmund Belfour. The sum is small enough in all conscience; but let us "not look a gift-horse in the mouth," especially as we have a *rider* at hand.

As Mr. Belfour's tenure of office has been of no ordinary duration, and his services of no common kind or limited value, I would suggest (although assuredly I am very far from being alone, or first in conceiving the idea) that a fair opportunity now offers to the members and fellows generally to endorse the feeling of the Council by subscribing their individual quota tn a more useful present than a piece of plate so accorded can possibly be rendered, in the shape of a purse of gold.

I therefore beg to submit to the members of the Council that, having given as much out of the College money as they have felt justified in voting, a roomy margin for adding their own guineas remains to them, especially to those who have had the honour of the office of president, and the assistance of the secretary. I am confident their example would not only be respected, but readily responded to by every fellow and every member who has the means at command to bear merited testimony to one who has done so much to uphold and advance the respectability of the body of the profession.

I would recommend that a committee be formed forthwith, for the purpose of carrying out at once the project I have thus feebly advocated. And, as "bis dat qui cito dat," or, in other words, that is most palatable which is not kept too long, I would advise that the subscription should be closed in three months from the time it is opened; and that a guinea should (excepting always from members of the Council) be the maximum of contributions. More Mr. Secretary Belfour would, I am persuaded, regard as anything but a compliment; and less would not be esteemed less favourably than the widow's mite.

There is not in my opinion a medical periodical that will not echo all I have said of the deserts of Mr. Belfour.

I am, etc., An Associate.

November 28th, 1860.

P.S. I enclose my card, as I wish not to claim a start in advance, where all would be proud to take the lead and none would like to be outrun.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Of sons, the wives of—

Brown, Charles G., M.D., Sloane Street, on November 24.
Fowler, Robert, M.D., 145, Bishopsgate Street Without, on November 24.
Reed, Daniel, M.D., Hazelwood, Banffshire, on November 22.
Shone, W. J., Esq., Harbury, Warwickshire, on November 22.
Skrimshire, George, Esq., 6, Crescent Place, Blackfriars, on November 20.

Of daughters, the wives of—

Horton, Charles, M.D., Bromsgrove, on November 25.
*Macaulay, Thomas, jun., Esq., Kibworth, on November 25.
Randall, John, M.D., 14, Portman Street, on November 26.
Thane, W. D., Esq., 15, Park Place Villas, Maida Hill West, on November 21. (Stillborn.)

MARRIAGES.

Smith, H. J., Esq., Surgeon, to Annie, daughter of F. Robertson, Esq., late Collector of Bellary, India, at St. Pancras, on November 14.
Tayler, William H., Esq., Surgeon, to Mary Ann, widow of the late John C. Bristow, Esq., of Ullswater, at St. George's, Hanover Square, on November 21.
*Thompson, Charles R., Esq., of Westerham, to Emma, third surviving daughter of the late James G. L. Trimbey, Esq., of Binfield Lodge, Berks, at Oxted, on November 21.
Turner, William F. J., Esq., Surgeon, Ryde, to Mary E. K., eldest daughter of Thomas S. Harvey, Esq., Clarendon Villas, Notting Hill, on November 27.

DEATHS.

Coles, James, Esq., Surgeon, at Weston-super-Mare, aged 57, on November 20.
Evans. On November 23, at 6, Rifle Terrace, Bayswater, Jane W., wife of *John Evans, M.D.
Halahan, —, M.D., Inspector-General of Hospitals, aged 70, in Guernsey, on November 23.

KITCHENER. On November 18, at Boyne Terrace, Jersey, aged 22, Isabel E., wife of Thomas Kitchener, M.D.

SPETTIGUE. On November 24, at Exmouth, aged 58, Sophia, wife of John Spettigue, Esq., Surgeon.

THOMSON, Wm., M.D., at Exeter, aged 61, on November 25.

YOUNG. On November 18, at Gresford Cottage, Wrexham, aged 3 months, the infant son of Lake Young, Esq., Surgeon.

PASS LISTS.

ROYAL COLLEGE OF SURGEONS. FELLOWS admitted at a meeting of the Court of Examiners, on November 29th:—

BURY, George William Fleetwood, Whetstone, Middlesex; diploma of membership dated Dec. 12, 1856
CLAPTAN, William, St. Thomas's Hospital; March 20, 1857
CROSLEY, Thomas B., Finsbury Place; May 21, 1852
DUDLEY, William Lewis, M.D., St. Andrew's, Bogata, New Granada; December 29, 1846
GILL, Walter Battershell, M.D.Lond., Cambridge Place, Regent's Park; April 9, 1857
SMITH, Eustace, M.B.Lond., Leamington; Nov. 5, 1858
WOODHOUSE, Thomas James, Wells Street, Hackney; March 20, 1857

It may not perhaps be generally known, that by a recent regulation of the Council of the College, Graduates in Medicine of the Universities of London, Oxford, and Cambridge, are admitted to the Fellowship after having passed the professional examination in Surgery only.

APOTHECARIES' HALL. LICENTIATES admitted on *Thursday, November 22nd*, 1860:—

HOYLE, William, Slaithwaite, Yorkshire
ILIFFE, Robert, Coventry
SAVAGE, James, Bridlington Quay, Yorkshire
STEELE, James, Lancaster
WILLIAM, John, Dyffryn, Merionethshire

A PROSECUTION UNDER THE MEDICAL ACT.

IN the Court of Queen's Bench, on November 21st, before Lord Chief Justice Cockburn, and Justices Wightman, Hill, and Blackburn, a case was tried, which had been stated by the stipendiary magistrate of Liverpool for the opinion of this court, and it raised the question whether the facts set forth in the case were sufficient in law to warrant the conviction of the respondent, whom the magistrate had declined to convict of an offence against the 40th section of the new Medical Act (the 21st and 22d of Victoria, cap. 90).

It appeared that the appellant, Arthur Brown Steele, hon. secretary to the Liverpool Medical Registration Society, had caused the respondent, John Hamilton, to be summoned before the magistrate upon an information which charged that he, on the 21st of February, 1860, wilfully and falsely pretended to be a surgeon, general practitioner or apothecary, and used the name of surgeon, general practitioner or apothecary, or some name, title, addition, or description implying that he was registered under the Medical Act, or that he was recognised by law as a surgeon, practitioner in medicine, or apothecary, whereby he became liable to a penalty of £20. When the respondent appeared before the magistrate, it was proved that he had signed the following certificate:—

"*Medical Certificate.*

"I hereby certify that I attended William Hayes, late of 110, Mill Street, that died the 21st day of February; cause of death, enteritis; and that I have no reason to attribute his death to poison, violence, or criminal neglect. "JOHN HAMILTON.
"Profession, Botanic Surgeon,
"day of February 22, 1860. "Residence, 94, Mill Street."

It was also proved that over the door of the house where the respondent carried on his business was painted in large legible letters, "J. Hamilton, Surgeon," and, in very small characters underneath, "Boston, U.S."; and, upon a glass panel of the door itself was painted, "J. Hamilton, anti-registered Surgeon." The words "anti-registered" were considerably smaller than the words "J. Hamilton, Surgeon," and so as to be illegible, except upon close inspection. The magistrate dismissed the information; but being required by the appellant to state a case, he submitted the following question to this court, viz. "Whether the evidence was sufficient in law to warrant a conviction under the 40th section of the Medical Act. If the court are of opinion that the evidence was sufficient in law, then the magistrate prays the court to make such order or conviction as the court shall think fit."

Mr. L. TEMPLE, who appeared for the appellant, feared the case must be governed by the decision in the Court of Common Pleas, "Pedgrift *v.* Chevallier" (29, L. J., M. C., 225), unless it could be shown that the respondent was not in practice before the 1st of August, 1815. Nothing was stated on that subject in the case; but as the respondent, he believed, was only about 40 years of age, he applied that the case might be sent back to be amended.

Mr. COOK EVANS (with whom was Mr. Seymour), for the respondent, said the case had already been before two magistrates, both of whom had refused to convict, and he hoped the case would not be sent back. He should contend that the case was concluded by the decision in the Common Pleas, where it had been held that for a person merely to call himself a surgeon, without being duly registered, was no offence against the 40th section.

Mr. TEMPLE contended that the respondent had falsely pretended to be a surgeon by signing a medical certificate for burial. The 37th section of the Medical Act enacted that no certificate required by any Act of Parliament should be valid unless the person signing the same be registered under the Act.

Mr. EVANS said that the 37th section referred to cases where the certificate of a surgeon was required—for instance, in the case of an insane person whom it might be proposed to send to a lunatic asylum. But the certificate as to the cause of death might be given by any person who was present at the death.

Mr. Justice HILL referred to the 25th section of the Registration Act (6th and 7th William IV, cap. 86), and said that was so.

Mr. Justice BLACKBURN thought that part of the case was disposed of.

Mr. TEMPLE proceeded to call attention to the case, in which it was found that the words "anti-registered" were written in very small letters only, so as to be illegible except upon close inspection.

Mr. Justice WIGHTMAN referred to the 40th section, and suggested that, to bring the case within it, it must be shown that the party falsely pretended to be a surgeon, etc., "implying that he is registered under the Act, or that he is recognized by law as a physician, or surgeon," etc. The words of the section were,—

"Any person who shall wilfully and falsely pretend to be or take or use the name of a physician, doctor of medicine, licentiate in medicine and surgery, bachelor of medicine, surgeon, general practitioner, or apothecary, or any name, title, or addition, or description implying that he is registered under this Act, or that he is recognised by law as a physician, or surgeon, licentiate in medicine and surgery, or a practitioner in medicine, or an apothecary, shall, upon a summary conviction for any such offence, pay a sum not exceeding £20."

Lord Chief Justice COCKBURN said there was nothing in the Act to prevent a person from merely practising as a surgeon without being registered. His Lordship thought the decision of the magistrates should be affirmed; but at the same time, he thought that a person who wrote "anti-registered" in very small letters was not entitled to costs.

The other Judges were of the same opinion.

Judgment affirmed without costs.

POLITICS IN MEDICINE. A meeting of the Southern medical students in New York was held on the evening of November 9th, at the Breckenridge head-quarters on Broadway, opposite Astor-Place, to take action as to whether they should go home or remain, since Mr. Lincoln has been elected. The Hon. Mr. Clinton, of Mississippi, Dr. Sims, of this city, Captain Morgan, of Tennessee, Colonel Dick, of Maryland, and General Bynum, of Tennessee, addressed the meeting. The spirit of the assemblage was decidedly in favour of disunion, and of Southerners leaving the city immediately. Speakers favouring these views were applauded, while those advocating milder measures were hissed down.

TESTIMONIAL TO DR. P. H. WILLIAMS. On November 23rd, a very handsome and valuable time-piece was presented to Dr. Philip H. Williams, of Worcester, with a purse containing one hundred and twenty-five sovereigns, as an acknowledgment, by the subscribers to the Dispensary in that city, of his services rendered to that Institution during the period of twelve years.

EPIDEMIOLOGICAL SOCIETY. On Monday, December 3rd, a paper will be read on "Cholera at St. Jago, Cape de Verds, in 1856," by Dr. Francisco Frederico Hopffers.